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ABSTRACT

In Fall 1994, the San Diego Community College District (SDCCD), in California, conducted a study to determine the validity of the Mathematics Diagnostic Testing Project (MDTP) placement test. The MDTP provides tests at four levels (i.e., algebra readiness, elementary algebra, intermediate algebra, and pre-calculus) and is used in the District for mathematics placement. The study sample consisted of 2,294 District students who took the test in fall 1994 and were subsequently placed in elementary algebra, intermediate algebra, or trigonometry courses. Test scores were compared to student ethnicity, gender, age, and achievement as measured by grades in the mathematics courses and student grade point averages (GPAs). Study findings included the following: (1) for elementary algebra students, the MDTP elementary algebra test was a better predictor of GPA than the algebra readiness test; (2) for intermediate students, the correlation between the intermediate test and GPA was stronger than the correlation found between the elementary test and GPA; (3) no correlation was found between intermediate algebra test scores and GPA for trigonometry students; and (4) while significant effects were found for student characteristics on MDTP test scores, these were reduced by factoring in students' number of years spent out of school before entering college and high school GPA. Appendixes comprising 90% of the publication provide data on cut score validity, test score validity, the relationship between test scores and assessment survey responses, the effect of student characteristics on test scores, and demographics survey from the MDTP. (HAA)

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ED 398 964

MATH PLACEMENT

VALIDATION STUDY

A Summary of the Criterion-Related Validity Evidence and Multiple Measures Data for the San Diego Community College District

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SDCCD Research and Planning

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JC 960 499

Math Placement Validation Study

Method

Purpose

The purpose of this study was to analyze the criterion-related validity evidence of the Mathematics Diagnostic Testing Project (MDTP) placement tests used to recommend students to various levels in the mathematics curriculum in the San Diego Community College District (SDCCD).

Design

This study examined the relationship between math placement scores and students' performance through correlational and regression methods. It also employed two by two classification tables to assess the utility of various cut scores for placement.

Subjects

The participants were 2294 community college mathematics students in Fall 1994. The target groups were the students enrolled in Math 54 (n=642), Math 100 (n=382) or Math 104 (n=94). Data collected from students enrolled in other courses were not analyzed due to small sample sizes.

Instrument

All students took the California State University/University of California Mathematics Diagnostic Testing Project Algebra Readiness Test (1985 pre-release version PA 50/85). The Mathematics Diagnostic Testing Project consists of four levels. The easiest level is called Algebra Readiness Test and consists of 50 items. The second level is the Elementary Algebra Test and has two versions, Form A and C, with 50 items. The third level is

Intermediate Algebra Test with two versions (Form A and C) and contains 45 items. The most difficult level is called the Precalculus Test and consists of 60 items

Criterion measures

Course grades were used as the students' performance criterion. These grades were used in three different measures of students' outcome.

A difficulty here is that failing students may not remain in the course long enough to receive final grades and receive a withdrawal ('W). The "W" notation may be handled in several ways: a) it may be treated as a non-successful outcome, b) the grade the student was earning at the time of withdrawal may be substituted as a criterion score, or c) students who earned a "W" may be excluded from the study.

Decisions about the handling of "W"s should reflect the college's view of the role of placement and the meaning of the "W" grade. If the "W" is viewed as a termination of enrollment because of personal circumstances unrelated to course success then the test should not be expected to predict "W"s --- they should be excluded from the analysis. If the "W" is seen as a sort of substitute for a failing grade, then it is clearly an unsuccessful outcome that the test should expected to predict and "W"s should be included in the analysis. Perhaps the best practice is to ask instructors to provide a grade for each withdrawn student on the basis of the work completed prior to withdrawal. However because such mid-semester data were not available to this analysis, the 'W' grade was either analyzed separately, or excluded from the analysis because of its weak relationship to the predictors.

As another measure, student grades were dichotomized at the "C" or higher level as a measure of "success." Success ("A", "B", "C", or "CR") was equal to 1 point, and non-success ('D", "F", "NC", "W", or "I") was equal to 0 points. This measure was used in the classification table analysis section of this report to determine the optimal cut scores.

In the second measure, a traditional GPA was used with grades of "A" through "F" were assigned to a metric based on grade points, with "A" equal to 4 points, "B" equal to 3 points and so on. The students who earned "W" and the relatively few others who received "I", "CR" or "NC" were excluded from this measure. However, because of the high proportion of W grades assigned, use of this measure, particularly in courses for which limited data were available, brought down available sample sizes dramatically. When possible, this measure was used in the correlational analysis section of this report.

In the third measure, course outcome was dichotomized into withdrawal, with "W" equal to 1 point and completion with "A" equaling points, "B" equaling three points, "C" equaling two points, and "D," "F," "NC," and "W" equaling one point. This is referred to in the study and tables that follow as Modified GPA (MODGPA). This measure was used when it was uncertain if the W grade reflected academic performance or when sample sizes dropped due to exclusion of the W student and jeopardized the reliability of the observed statistics or coefficients. Students who received an Incomplete grade notation were excluded from this measure.

Procedure

Research subjects were the fall, 1994 students who took an assessment test during the fall testing period, and enrolled that same term in a mathematics course. Participants in this retrospective study were placed in math courses by pre-existing assessment or counseling procedures or by self-selection. The scores of the respective Mathematics Diagnostic Testing Test were used to place students in the math courses. A description of the MDTP testing program tests is included in the appendix to this report.

At the time of assessment, students are also asked to complete a survey that includes questions about educational background, achievement, plans, and limited demographic information. Many of the variables collected on the

survey form are intended to be used as potential additional measures for use in arriving at a more accurate prediction of placement. The student responses to these survey questions are stored in a data file with the scores achieved on the respective math placement test. This file was matched by the Research and Planning office with other student data, course information, and course outcomes using student ID as the matching variable.

For this study, criterion related evidence was assessed using final grades found on the student extract file used by the Research office to match student assessment, survey, and course data

Results

Math 54

There were 642 students enrolled in Math 54 (Elementary Algebra) in Fall 1994 validation sample. The majority of them completed the Algebra Readiness Test (n=344) or Elementary Algebra Test Form A (n=213) for entry into Math 54. The average score of Algebra Readiness Test was 33.25 with standard deviation of 7.64. The mean result of Elementary Algebra Test Form A was 22.13 with standard deviation of 6.37

Correlational analysis was employed to examine the relationship between the result of placement test and students' GPA. As described above, two types of GPA were calculated for the purposes of this study. One was calculated excluding students who earned a "W" grade, and it is referred as college GPA in this report. The other is calculated including students who earned a "W" grade and referred to as "modified GPA (MOD GPA)" in this report. For Math 54 students, the average college GPA was 2.63 with standard deviation of 1.17, and the mean of MOD GPA was 2.15 with standard deviation of 1.47.

Although students are referred using either the Elementary Algebra Test Form A or the Algebra Readiness test, the Elementary Algebra Test seemed to be a better predictor of students' college GPA than Algebra Readiness Test at the Math 54 level. There was a positive correlation between the Elementary Algebra Test and college GPA (r=.32). When college GPA was modified by including students who earned a "W" grade, the correlation coefficient increased (r=.40) thus exceeding the recommended .35 correlation. There was a lower correlation between the score on the Algebra Readiness Test and college GPA (r=.18). The correlation was also lower for Algebra Readiness Test and MOD GPA (r=.15). One recommendation from these findings is that students planning to enroll in Math 54 be encouraged to take the Elementary Algebra Test (Math Test 2)

In addition to the results of the placement tests, students are asked to provide various educational background data which can account for and predict their performance in college. To identify a group of measures that, in addition to MDTP tests would optimally predict student success in Math 54 or other courses, multiple regression procedures were used. Although several variables entered the prediction of final grade for Math 54 in addition to the placement test, the two consistently strongest variables (those with the highest correlations with the criterion were question 9 (Number of Years Out of School) and question 12 (High School GPA). The regression model suggested that the interaction of these two variables would strengthen the multiple R with the criterion variable. Thus question 9 and question 12 were multiplied and added to the placement test score. This resulted in a 42 point scale being added to the respective placement test. In the case of the Algebra Readiness Test and the Elementary Algebra Test, this resulted in a 92 point scale (50 points on the test, plus 42 for the new predictor). The interaction of high school GPA and number of years spent out of school was found to be positively correlated with college GPA (r=.25) and modified GPA (r=.26). Therefore, responses to Question 9 and Question 12 were multiplied and added to the placement tests score to create a more comprehensive measure. The frequency distribution of this multiple measure approximate a normal distribution and the measures of central tendency further confirm the approximate normality of the distribution.

Although the interaction of question 9 and question 12 alone was significantly related to the criterion variable, when combined with the respective test score, the correlations were improved. This multiple measure when added to the placement score was found to be more strongly correlated with college GPA and allowed us to predict students' outcome more accurately. The results differed by test taken. There was a positive correlation coefficient between college GPA and the result of Elementary Algebra Test combined with Q9 x 12 (r= .45). This correlation exceeds the desired standard of .35. The correlation between college GPA and the Algebra

Readiness Test with Q9 x 12 was lower, at .25. However, both correlations were statistically significant at the .001 level.

The multiple measure was also more highly correlated with modified GPA. The correlation coefficient was .43 for the modified GPA and Elementary Algebra Test with Q9 x 12. The correlation coefficient between the modified GPA and Algebra Readiness Test combined with Q9 x 12 was also higher (r=.19) than with Algebra Readiness alone. Thus the addition of the interaction of high school GPA and years out of school (total possible points=42) to the respective test score strengthens the correlations. Moreover, it was found that the two additional measures were not highly correlated to the placement test score.

Math 100

Of all 382 students enrolled in Math 100 in Fall 1994, the majority of them completed Elementary Algebra Test From A (n=175) or Intermediate Algebra Test Form A(n=114). The mean score for Elementary Algebra Test was 33.44 with standard deviation of 6.83. The mean result of Intermediate Algebra Test was 19.99 with standard deviation of 5.86. For students enrolled in Math 100 in Fall 1994, the mean GPA was 2.61 (sd.= 1.19) and the mean modified GPA was 2.18 (sd.=1.45).

For students enrolled in Math 100 (Intermediate Algebra with Geometry), there was a modest correlation between the Elementary Algebra Test and college GPA (r=.14). The college GPA was more strongly correlated with the scores of Intermediate Algebra Test (r=.36). MOD GPA was also more strongly correlated with Intermediate Algebra (r=.30) than Elementary Algebra (r=.21). This finding suggests that for Math 100, the Intermediate Algebra Test , which also can be used as a Precalculus Readiness Test, is a stronger predictor for Math 100 final grades. The Intermediate Algebra Test scores' correlation with final grade exceeds the desired standard of .35.

As with Math 54, students' high school GPA and time they spent out of school were found in regression modeling to be significantly related to the

criterion variable of final grade in Math 100. The new predictor based on the interaction of questions 9 and 12 were added to the test scores and the correlations obtained with final grade. There was a positive correlation between college GPA and Elementary Algebra Test and the Math Predictor (Q9 x12 combined with test score) (r= .35). This correlation equals the desired standard. When used with the Intermediate Algebra Test, the results were more compelling. College GPA was more strongly correlated with the Intermediate Algebra Test and Q9 x 12. (r=.45). The interested reader may consult the technical appendix to this report which contains regression plots and descriptive statistics for the sample.

When the dependent variable included the "W" notation (i.e., MOD GPA), the correlation dropped somewhat, but still exceeded the desired .35 threshold. This was found with both the Elementary Algebra Test and the Intermediate Algebra Test. (r= .37).

Math 104

Of 94 students enrolled in Math 104 (Trigonometry, a transfer level course to the California State University), nearly half of them (n=45) completed Intermediate Algebra Test Form A. Their mean score was 28.86 with standard deviation of 6.73. The average college GPA was 2.76 (sd.=1.03), and the mean of the Modified GPA was 2.00 (sd.= 1.52).

The result of Intermediate Algebra Test was not correlated with college GPA (r=.01) or MOD GPA (r=-.01). However, product of responses to Question 9 and 12 was positively correlated with college GPA (r=.38) and with modified GPA (r=.35). According to the teaching faculty, many of the students enrolling at the higher levels of math are often place themselves without the diagnostic information provided by placement tests. Those who took the placement test for Math 104 or higher levels were self-selected and generally small in number compared with the lower levels. Thus, the number of students who completed the placement test and responded to question 9 and 12 was quite small. Therefore, the relationship between GPA and the

multiple measure was not examined due to the small sample size. To gather additional information on the relationship between the placement test scores, and student variables for the upper levels of math, the mathematics faculty leadership agreed to participate in a field test of the tests and survey forms for the upper levels of math. The results of this analysis should be available by the end of the spring, 1996 semester. The purpose of this field test to identify valid placement scores and additional measures for student placement in these levels of mathematics.

Test Bias / Disproportionate Impact

The scores of math placement tests were broken down by ethnicity, age, and gender to examine whether the tests unfairly biased certain groups.

For the MDTP Algebra Readiness Test, there was a significant effect of ethnicity on the test score, and ethnicity accounted for approximately 10% (eta-square statistic) of variance observed in the test score. In comparisons of Caucasian and non-Caucasian groups. Caucasian scored slightly higher than non-Caucasian group. The ethnic difference accounted for approximately 9% of the variance in test score.

The effect of gender was also significant, with men scoring slightly higher than women. These differences appear to be of limited practical significance. The observed eta-square statistic showed that gender accounted for only approximately 1.4% of the variance in the test scores. The effect of age was also significant, and it explained about 1.8% of the variance in the test scores.

For the MDTP Elementary Algebra Test, there was a significant effect of ethnicity, but it accounted for less variance (4.2%) compared to the Algebra Readiness Test (10.2%). In comparison of Caucasian and non-Caucasian student groupings, Caucasian performed slightly better than the non-Caucasian group. However, the variance accounted for by the ethnic difference was approximately 05%. The effect of gender was also reduced in the Elementary Algebra Test. There was no significant difference between men and women in the test scores, and gender accounted for less than 4% of the variance in the test scores. The effect of age was significant but accounted for only a small portion of variance in the test result (1.8%).

For the MDTP Intermediate Algebra Test, the effect of ethnicity was still significant, and it explains about 4.3% of the variance in the test result. The difference between Caucasian and non-Caucasian was significant and the ethnic difference accounted for approximately 2.9% of the variance in the test scores.

There was no significant gender difference found when comparing the scores of Intermediate Algebra Test, as gender accounted for 0.3% of variance in the test result. The effect of age was significant, and age accounted for about 1.7% of the variance observed in the test result. However, these differences, while significant statistically, are of limited practical significance as suggested by the small eta-square statistic for age and gender groupings.

The Math Predictor multiple measure developed by adding the product of the responses to Question 9 and 12 to the raw score of placement tests appeared to reduce impact of ethnicity on the test performance. It reduced the variance accounted for by ethnicity in the result of Algebra Readiness Test and Elementary Algebra Test. In addition, the difference between Caucasian and non-Caucasian was also decreased in Algebra Readiness Test and Intermediate Algebra Test. There was a very slight influence of this Math Predictor measure on gender differences.

In contrast, with this multiple measure, age accounted for much more variance than when placement tests were used alone. This finding is not surprising considering that one of the factors incorporated in the measure was the time students spent out of school and it could be proportional to students' chronological age. For example, it was found that the age category of students 17 and under scored higher than older students. According to the college faculty, many of these students are high school honors students who are taking college courses or are in accelerated programs. Thus the construct of years out of school multiplied by high school GPA may be somewhat biased against this younger age category, although proportion of these students in the college is relatively small.

Test bias and disproportionate impact data are shown in the table below.

Proportion of Variance Accounted for by Ethnicity, Gender, and Age
Eta-Square Statistic Derived From SPSS Analysis of Variance Procedure

	Algebra Readiness Test	Algebra Readiness Test combined with Q 9 x 12
Ethnicity	10.27%	7.39%
Caucasian vs. non-Caucasian	9.31%	6.73%
Gender	1.4%	2.54%
Age	1.88%	16.29%

	Elementary Algebra Test	Elementary Algebra Test combined with Q 9 x 12
Ethnicity	4.23%	2.86%
Caucasian vs. non-Caucasian	0.52%	0.5%
Gender	0.39%	1.13%
Age	1.83%	15.25%

	Intermediate Algebra Test	Intermediate Algebra Test combined with Q9 x 12
Ethnicity	4.37%	4.49%
Caucasian vs. non-Caucasian	2.95%	1.74%
Gender	0.31%	0.42%
Age	1.78%	8.56%

Thus it appears that there are some differences, particularly between white and non-white student groupings in test scores achieved on the MDTP tests, these differences are mitigated somewhat by the inclusion of the Math

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Predictor scale added to the math placement test raw score. As additional field test data are gathered to strengthen the reliability of the findings for the upper levels of math, additional test bias and disproportionate impact data will be gathered and reported. More extensive analyes by race, ethnicity , gender and age grouping is included in Appendix D of this report.

Cut Score Statistics

The following section discusses the utility of different cut scores using the recommended Mathematics Predictor in combination with the placement test taken by the student. The tables below show the percentages of students who would be placed correctly when different cut scores are utilized. These tables are included in the Appendix A to this report.

Validation and Cut Score Statistics

The tables in Appendix A contain data showing the effects on student eligibility and success at various points on the Mathematics Predictor. Cut score tables are shown for Math 54 (Elementary Algebra). Courses below Math 54 do not have skill level prerequisites, although students are encouraged to take a Math Placement test or see a counselor prior to enrolling in a basic skills course. However, because they do not have prerequisites, courses below Math 54 were not included in the analysis of cut score statistics. Additional cut score tables are included for Math 100 (Intermediate Algebra with Geometry) and Math 104 (Trigonometry). As stated earlier in this report, there were limited data available for either test scores or for the proposed Math Predictor scale because at the upper levels of math, most students tend to self select, or move into these courses by completing lower level courses. This is the purpose of the field test described earlier.

Math 54. The primary goal for establishing a preliminary cut score was to achieve the optimal balance of student access combined with improvements to the baseline success rate. As shown in the attached table for Math 54 there are a wide range of possible scores that improve the baseline rates of success. For example a score of 35 or 36 appears to add approximately 7% to the baseline rate of success while maintaining eligibility for approximately 45% of the students. As the scale increases however, the baseline improvements show a steady decline, as the number eligible for the course diminishes. It was recommended to the Math faculty that a score of 36 to 46 be considered as a cut score for Math 54. Their recommendations are currently being tested and reviewed for modification.

Math 100. For Math 100, the summary cut score table is attached after the Math 54 table. Although the relationship between the predictor and the criterion variable does not appear as linear for Math 100 as it did for Math 54, there are several viable options for a selected cut score. For example, a cut score of 39-40 tends to add the most to the baseline rate of success while maintaining eligibility for a large proportion of students. A score of 44 still adds to the baseline, but restricts entry to this course to about one-half of the tested students. This may be more attractive to the faculty because there is more reliance on the test scores at the upper levels of the scale and less likelihood that a student can access a course only by getting the maximum possible on the survey questions. Although this does not appear to happen often, as the distribution for the predictor suggests, there is an approximately normal distribution for the Predictor at the Math 100 level. The database revealed that many students take the Intermediate Algebra placement test (Math 10 on the table) for entry into Math 100. This is a 45 item test and when the Math Predictor is added to it, the scale expands to a range of from 3 to 84 points. For this scale, the cut score table suggests that a score of from 27 to 30 would result in the largest additions to the baseline, although the gains are relatively modest, while still maintaining approximately the same proportion

of eligibility found when the placement test is used apart from other information.

Math 104. Cut score recommendations were less clear at the Math 104 level. This may be partly due to diminished sample sizes at this level, and the use of retrospective data which has the effect of pre-sorting students and thus limiting the observable effects of a new placement scheme. In addition, as discussed earlier, many students migrate to this and other transfer level courses through the completion of prior coursework. For this course, and other courses above it, the field test may provide more reliable estimates of the Math Predictor and student access and success. For the time being, It appears that scores in the 30-33 range do not negatively affect the baseline while adding a multiple measure to the placement recommendation. It also maintains greater access for students to attempt the course. However, interpretation of this cut score validation table should be done with caution because of small sample sizes and the truncation of distributions imposed by the retrospective data.

Summary

The MDTP scores show acceptable criterion related validity evidence when correlated with the criterion variable of final grade in Mathematics. This was confirmed through inspection of the correlation coefficients between the test scores and the final grade received in the course of interest. It was found through correlational methods and regression procedures that although several variables accounted for significant portions of the variance in the explanation of final grade, two variables were found to have the strongest relationship to the final grade in addition to the test scores. These two variables were survey questions from the assessment survey form given during assessment. These were questions 9 and 12 from the CAPP answer form. Question number 9 asks the student to indicate how many years he or she has been out of school. Question number 12 asks the student to indicate his or her grade point average in high school. The regression procedure

suggested that the interaction of these two variables might produce the most parsimonious model to explain variance in final grade. The two variables were multiplied together to produce a 42 point scale (question 9 has six possible points and question 12 has seven possible points). This scale is then added to the respective raw score of the MDTP test. The new predictor scale showed an approximately normal distribution for several levels of Math Placement test.

The new scale appears to have a mitigating effect on the potential disproportionate impact of the placement tests alone for non-white student groupings, but slightly exacerbates the negative effects on younger (17 and below) students. The proportion of variance explained by ethnic grouping is approximately 14% using MDTP tests alone, this statistic drops by 4% when the new Predictor scale is used. The differences attributed to the sex of the examinee were minimal in explaining differences in test score. As the field test for math placement at the upper levels continues, additional data will be gathered to determine the potential for predictor bias and disproportionate impact at these levels. It is recommended that college staff monitor the placement and outcomes of Black and Latino students in Mathematics because although the new scale does moderate the main effect of ethnicity on test performance, these two groups do score significantly lower than Asian, White, or Filipino students on the MDTP tests.

Additional technical data supporting this validation study can be found in the appendices to this report.

Appendix A

Cut Score Statistics and Validation Tables for Math 54, Math 100, and Math 104 Using Math Predictor Scale

Cut Score Statistics

Math 54

Predictor Score	*% Ineligible Passing*	*% Eligible Passing*	*Correctly Placed*	*Adds to Baseline*	*Number Eligible*	*% Eligible*
10	30.4	27.4	48.3	6.1	286	48.6
11	30.4	27.4	48.3	6.1	286	48.6
12	30.4	27.4	48.3	6.1	286	48.6
13	30.8	27.0	47.9	5.7	284	48.3
14	31.0	26.9	47.8	5.6	283	48.1
15	31.0	26.9	47.8	5.6	283	48.1
16	31.1	26.7	47.6	5.4	282	48.0
17	31.3	26.5	47.4	5.2	281	47.8
18	31.6	26.2	47.1	4.9	279	47.4
19	31.6	26.2	47.1	4.9	279	47.4
20	31.6	26.2	47.1	4.9	279	47.4
21	31.8	26.0	46.9	4.7	278	47.3
22	31.8	26.0	46.9	4.7	278	47.3
23	31.8	26.0	46.9	4.7	278	47.3
24	31.8	26.0	47.4	5.3	275	46.8
25	32.0	25.9	47.3	5.2	274	46.6
26	32.0	25.9	47.3	5.2	274	46.6
27	32.0	25.9	47.3	5.2	274	46.6
28	32.0	25.9	47.5	5.3	273	46.4
29	32.0	25.9	47.8	5.7	271	46.1
30	32.0	25.9	48.2	6.0	269	45.7
31	32.1	25.7	48.0	5.8	268	45.6
32	32.1	25.7	48.3	6.1	266	45.2
33	32.7	25.2	48.0	5.8	262	44.6
34	32.8	25.0	48.0	5.8	260	44.2
35	33.0	24.8	47.9	5.8	258	43.9
36	33.0	24.8	48.8	6.6	253	43.0
37	33.8	24.0	48.3	6.1	246	41.8
38	34.7	23.1	48.1	5.9	237	40.3
39	35.4	22.4	48.6	6.4	226	38.4
40	36.2	21.6	49.2	7.0	213	36.2
41	37.1	20.7	49.1	6.9	203	34.5
42	38.1	19.7	48.8	6.6	193	32.8
43	39.5	18.4	48.7	6.5	178	30.3
44	40.5	17.3	49.1	6.9	163	27.7
45	41.7	16.2	49.0	6.8	150	25.5
46	43.4	14.5	48.2	6.0	135	23.0
47	44.7	13.1	47.5	5.3	123	20.9
48	46.1	11.7	46.4	4.2	113	19.2
49	47.1	10.7	45.7	3.6	105	17.9
50	48.0	9.9	45.3	3.1	98	16.7

Cut Score Statistics

Math 54

Predictor Score	*% Ineligible Passing*	*% Eligible Passing*	*Correctly Placed*	*Adds to Baseline*	*Number Eligible*	*% Eligible*
51	49.3	8.5	45.2	3.1	82	13.9
52	50.2	7.7	45.5	3.3	71	12.1
53	50.5	7.3	45.7	3.6	65	11.1
54	51.2	6.6	45.0	2.9	61	10.4
55	51.5	6.3	45.2	3.1	56	9.5
56	52.4	5.4	45.2	3.0	46	7.8
57	52.6	5.3	45.4	3.3	43	7.3
58	53.6	4.3	44.9	2.8	34	5.8
59	54.3	3.6	44.2	2.1	30	5.1
60	54.4	3.4	44.2	2.0	28	4.8
61	54.6	3.2	44.0	1.8	27	4.6
62	54.8	3.1	43.9	1.7	26	4.4
63	54.9	2.9	43.9	1.7	24	4.1
64	54.9	2.9	44.2	2.0	22	3.7
65	55.6	2.2	43.5	1.3	18	3.1
66	56.1	1.7	43.2	1.0	14	2.4
67	56.3	1.5	43.0	.08	13	2.2

* Net Gain in Correct Placements is calculated using the Base Rate of Nonsuccess

Math 9 score + Q9 X q12, for Math 100 Baseline success rate=52.5%

SCORE	%INELIG PASSING	%ELIG PASSING	CORR. PLACED	ADDS TO BASELIN	# ELIG	% ELIG
35	5.1	47.5	55.1	2.6	173	87.4
36	5.1	47.5	56.1	3.6	171	86.4
37	6.6	46.0	55.6	3.1	166	83.8
38	7.6	44.9	56.0	3.5	161	81.3
39	7.6	44.9	59.0	6.5	155	78.3
40	9.6	42.9	58.1	5.6	149	75.3
41	14.6	37.9	55.6	3.1	134	67.7
42	16.7	35.9	54.6	2.1	128	64.6
43	20.2	32.3	54.5	2.0	114	57.6
44	23.7	28.8	56.1	3.6	97	49.0
45	27.3	25.3	53.6	1.1	88	44.4
46	29.8	22.7	54	1.5	77	38.9
47	32.3	20.2	54	1.5	67	33.8
48	32.3	20.2	56.1	3.6	63	31.8
49	36.4	16.2	53.6	1.1	52	26.3
50	37.9	14.6	52.5	0	48	24.2
51	39.4	13.1	53.0	0.5	41	20.7
52	42.4	10.1	51.5	-1.0	32	16.2
53	43.9	8.6	51	-1.5	27	13.6

Math10 score + Q9 X q12, for Math 100 Baseline success rate=60.6%

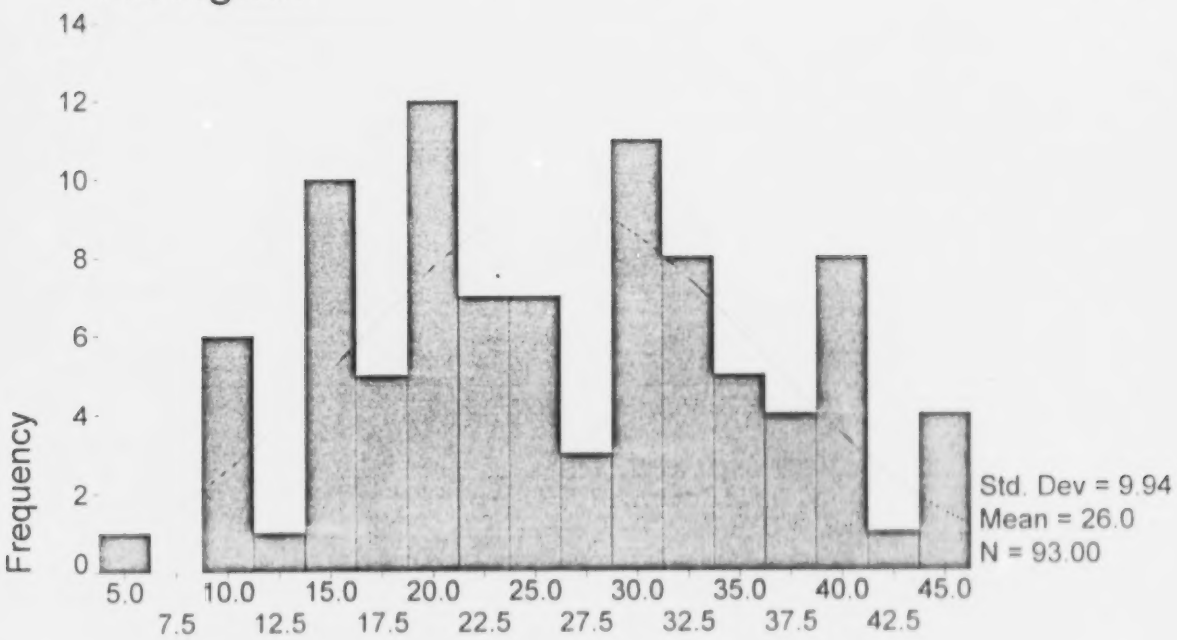
SCORE	%INELIG PASSING	%ELIG PASSING	CORR. PLACED	ADDS TO BASELIN	# ELIG	% ELIG
20	3.1	57.5	62.2	1.6	117	92.1
21	3.9	56.7	62.2	1.6	115	90.6
22	7.1	53.5	61.4	0.8	108	85
23	7.9	52.8	62.2	1.6	105	82.7
24	11.8	48.8	59.8	-0.8	98	77.2
25	13.4	47.2	59	-1.6	95	74.8
26	15.0	45.7	61.4	0.8	88	69.3
27	15.7	44.9	63.8	3.2	83	65.4
28	18.1	42.5	63	2.4	78	61.4
29	22.8	37.8	61.4	0.8	68	53.5
30	28.3	32.3	59.9	-0.7	56	44.1
31	32.3	28.3	58.2	-2.4	48	37.8
32	36.2	24.4	54.3	-6.3	43	33.9

Math 10 score + Q9 X q12, for Math 104 Baseline success rate=52.8%

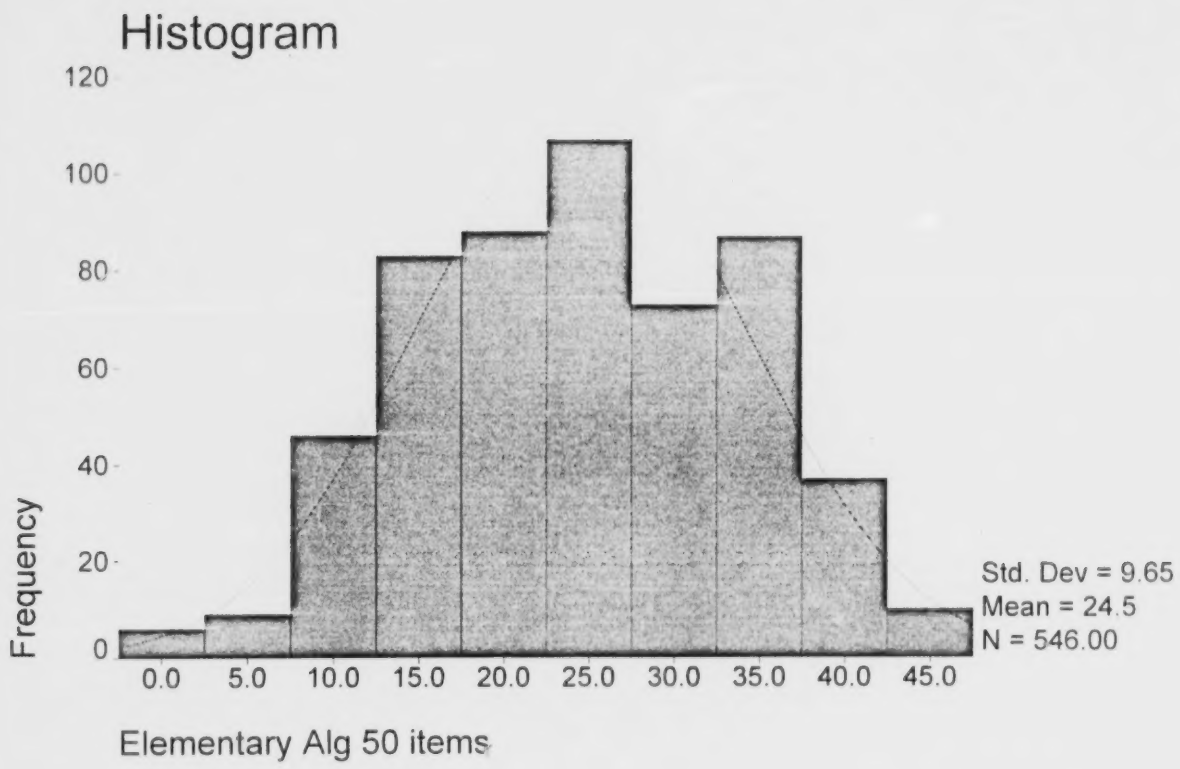
SCORE	%INELIG PASSING	%ELIG PASSING	CORR. PLACED	ADDS TO BASELIN	# ELIG	% ELIG
20	1.9	50.9	52.8	0	51	96.2
21	1.9	50.9	52.8	0	51	96.2
22	1.9	50.9	52.8	0	51	96.2
23	1.9	50.9	54.7	1.9	50	94.3
24	5.7	47.2	51	-1.8	48	90.6
25	5.7	47.2	51	-1.8	48	90.6
26	7.5	45.3	51	-1.8	46	86.8
27	7.5	45.3	51	-1.8	46	86.8
28	7.5	45.3	51	-1.8	46	86.8
29	9.4	43.4	49.1	-3.7	45	84.9
30	9.4	43.4	50.9	-1.9	44	83.0
31	11.3	41.5	52.8	0	41	77.4
32	11.3	41.5	52.8	0	41	77.4
33	13.2	39.6	52.8	0	39	73.6
34	17	35.8	49	-3.8	37	69.8
35	17	35.8	49	-3.8	37	69.8
36	24.5	28.3	47.2	-5.6	30	56.6
37	26.4	26.4	52.8	0	25	47.2
38	28.3	24.5	50.9	-1.9	24	45.3
39	34	18.9	45.3	-7.5	21	39.6
40	34	18.9	45.3	-7.5	21	39.6

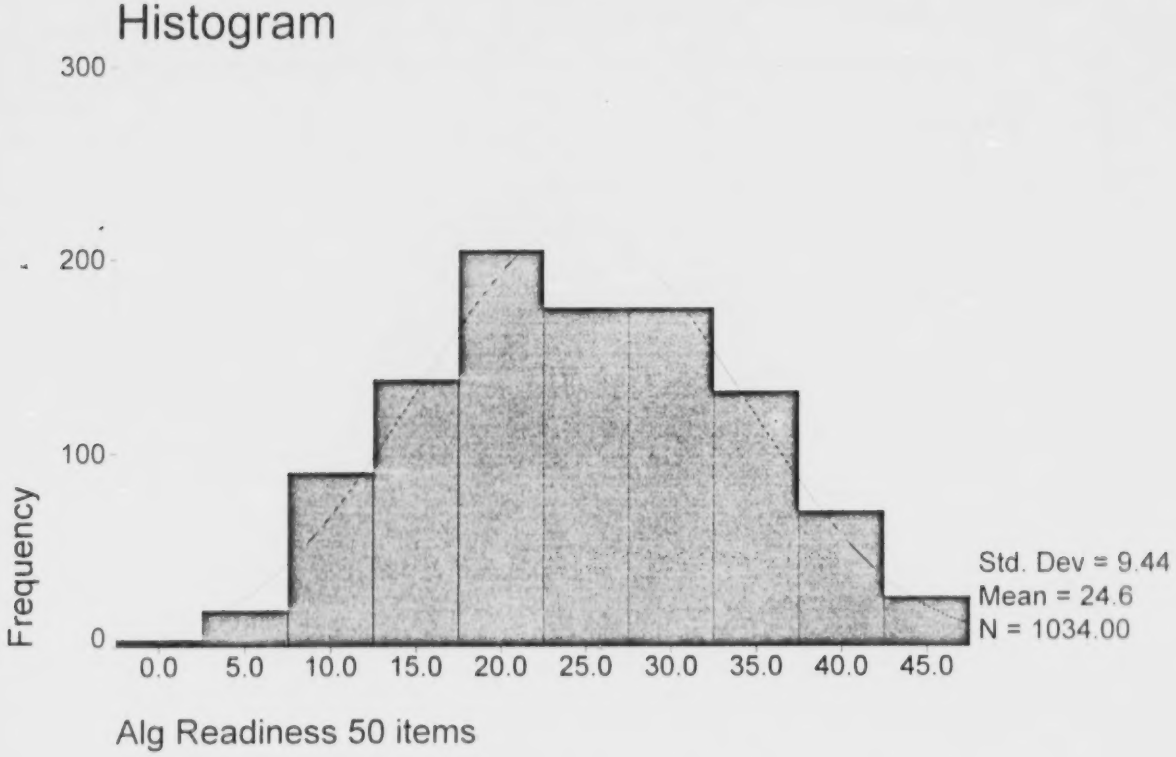
Appendix B

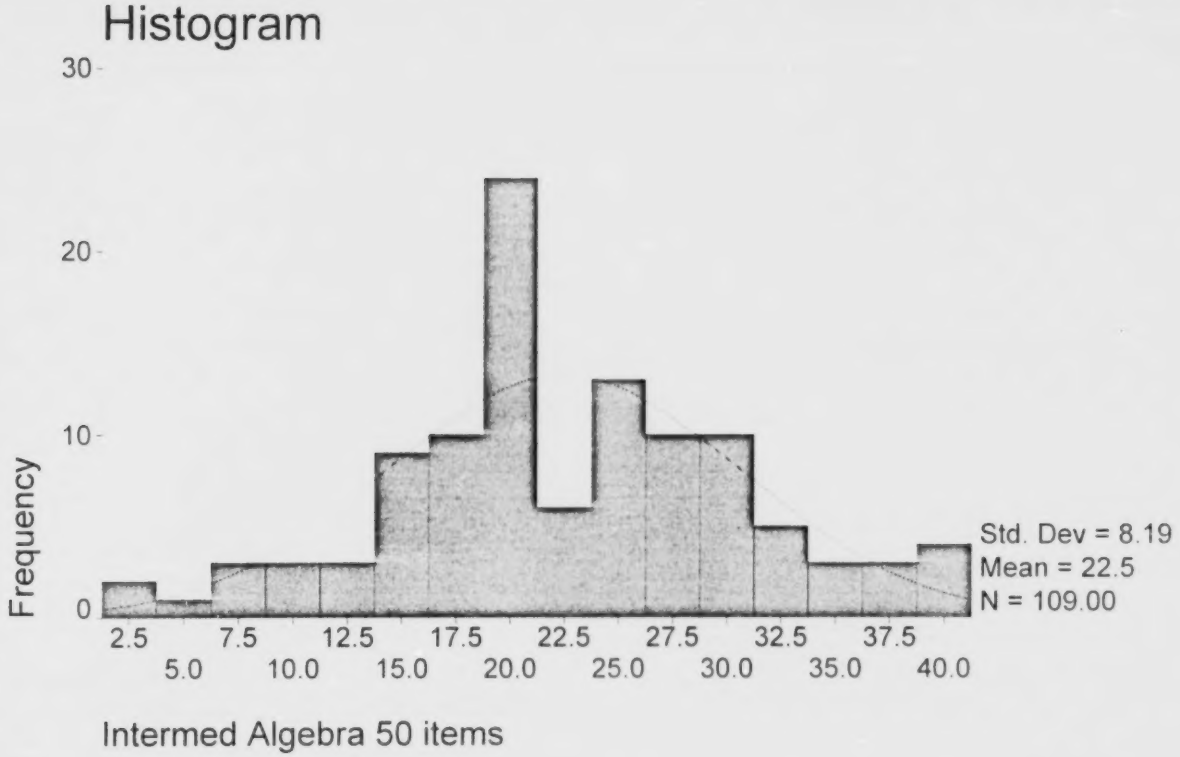
Descriptive Statistics and Plots of MDTP Test Scores and Predictor Scale with Criterion Variable

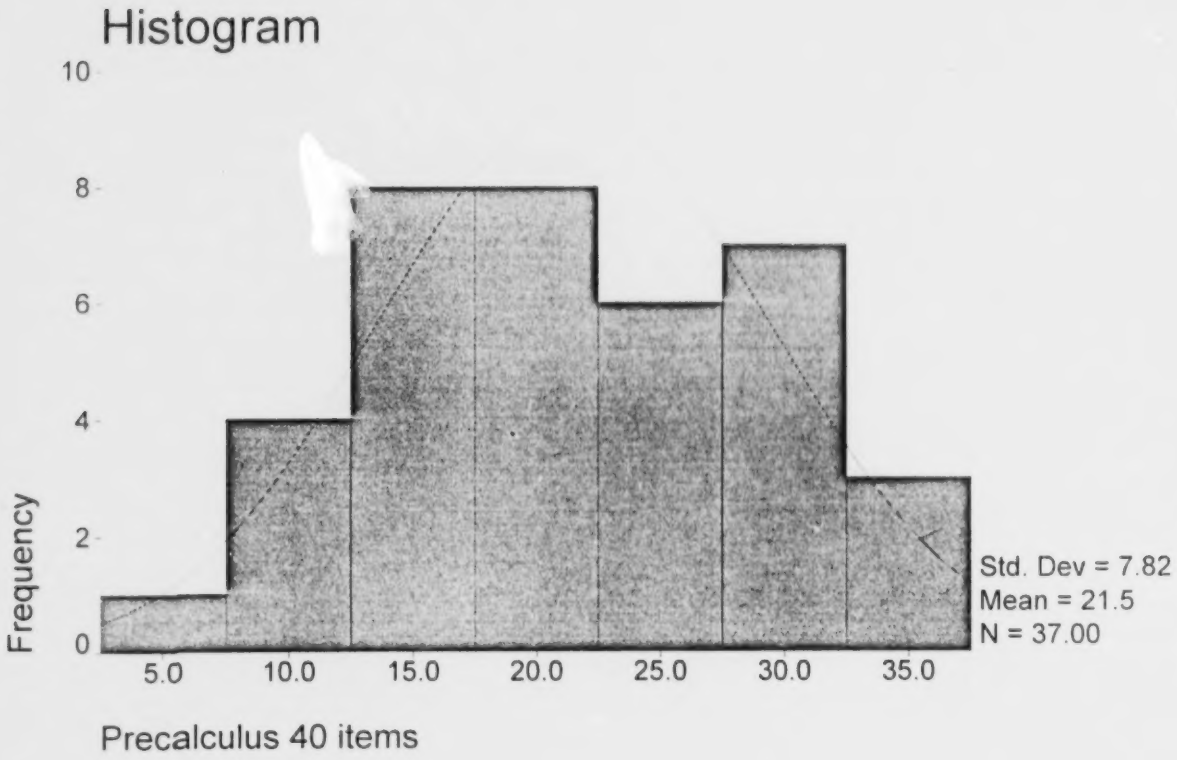


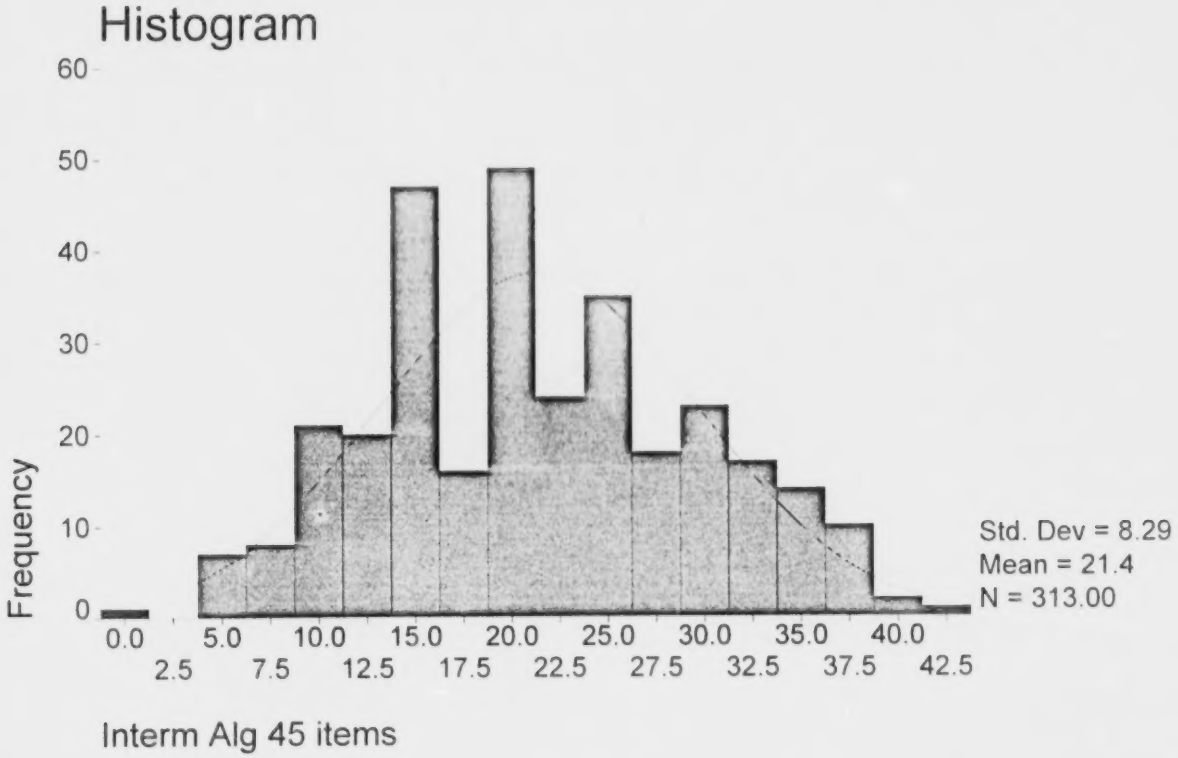
Elementary Algebra Form C 50 items

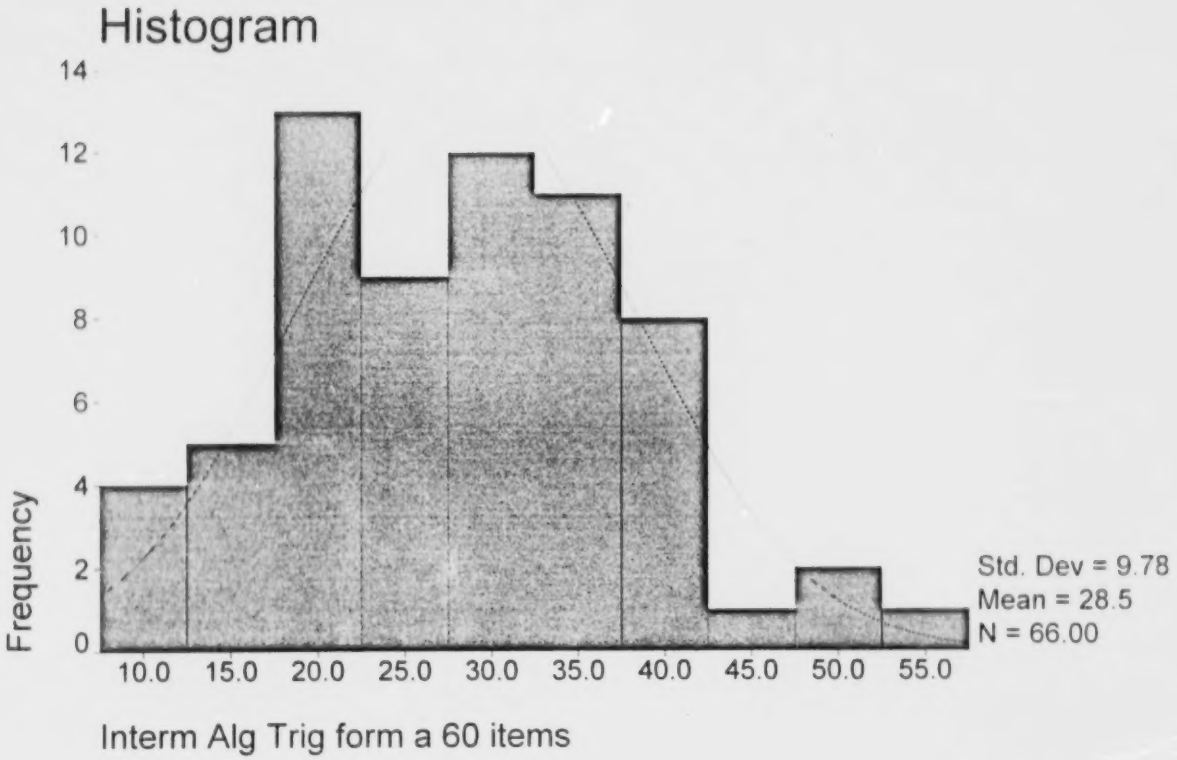

Histogram
120
100
80
60
40
20
0
Frequency
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
Std. Dev = 9.65
Mean = 24.5
N = 546.00
Elementary Alg 50 items

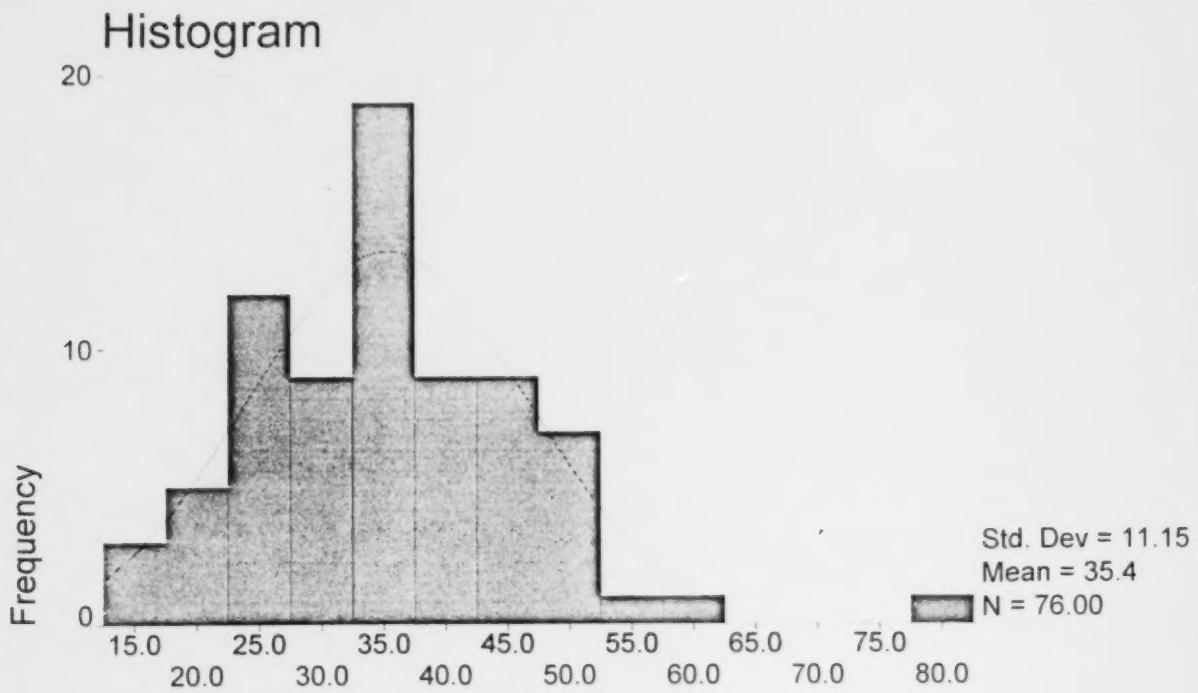

Histogram
300
200
100
0
Frequency
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
Std. Dev = 9.44
Mean = 24.6
N = 1034.00
Alg Readiness 50 items


Histogram
30
20
10
0
Frequency
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
37.5
40.0
Std. Dev = 8.19
Mean = 22.5
N = 109.00
Intermed Algebra 50 items

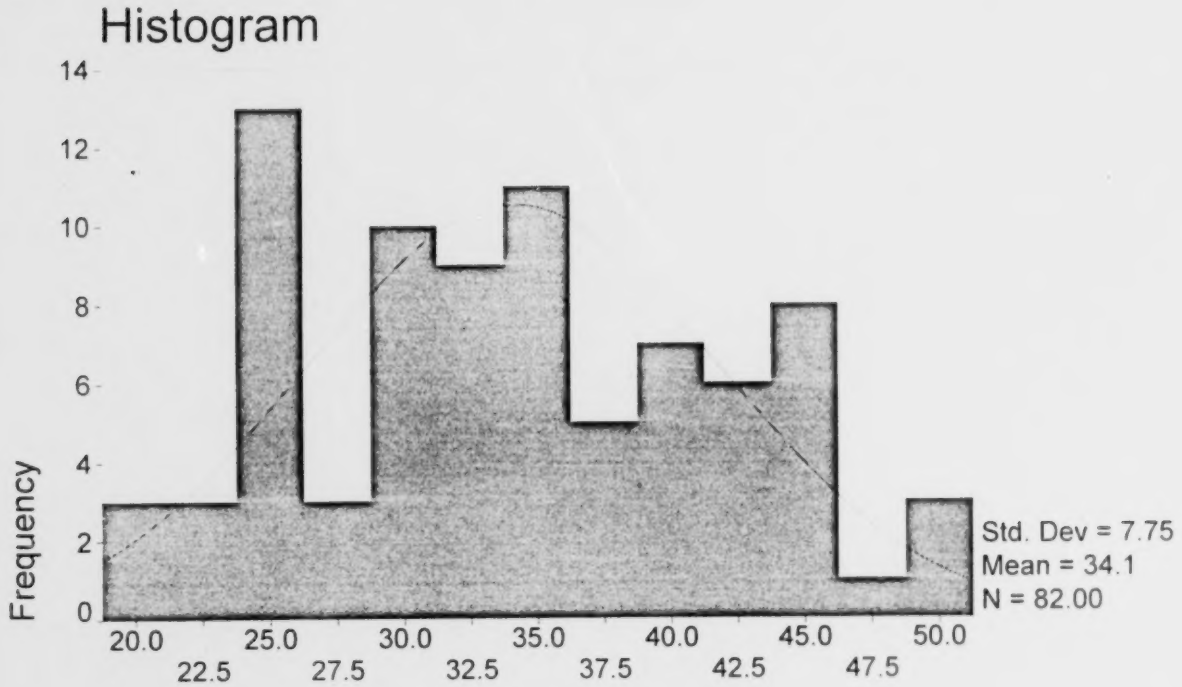

Histogram
10
8
6
4
2
0
Frequency
5.0
10.0
15.0
20.0
25.0
30.0
35.0
Std. Dev = 7.82
Mean = 21.5
N = 37.00
Precalculus 40 items


Histogram
60
50
40
30
20
10
0
Frequency
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
22.5
25.0
27.5
30.0
32.5
35.0
37.5
40.0
42.5
Std. Dev = 8.29
Mean = 21.4
N = 313.00
Interm Alg 45 items

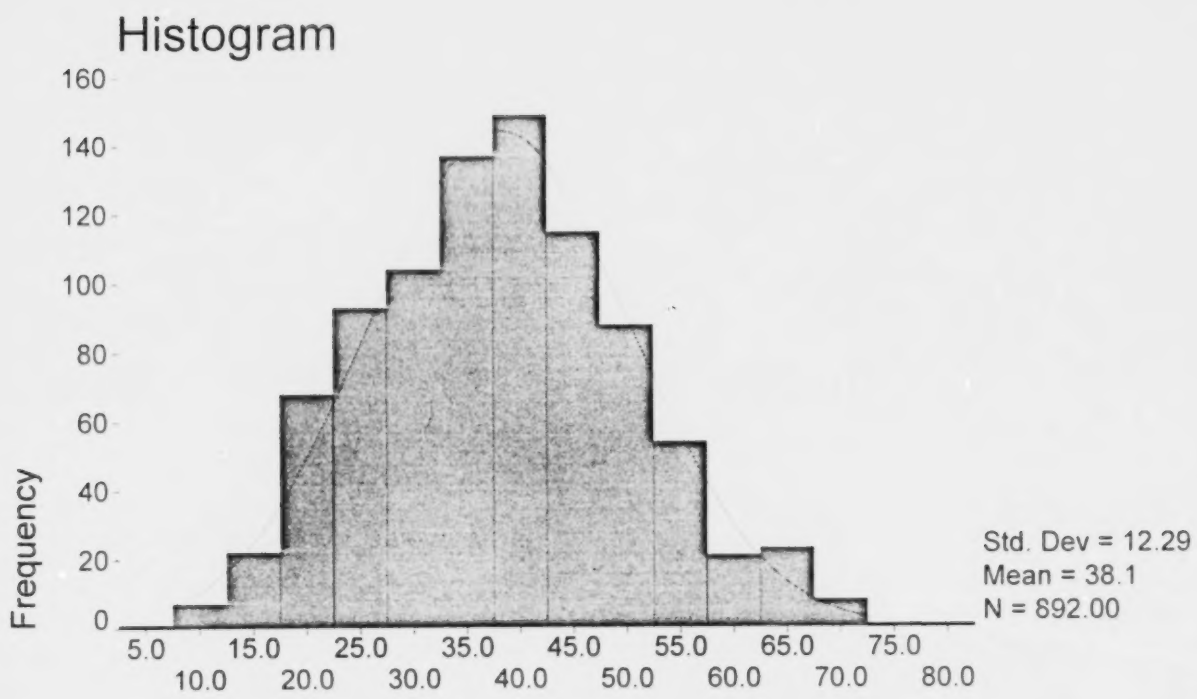

Histogram
14
12
10
8
6
4
2
0
Frequency
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
Std. Dev = 9.78
Mean = 28.5
N = 66.00
Interm Alg Trig form a 60 items

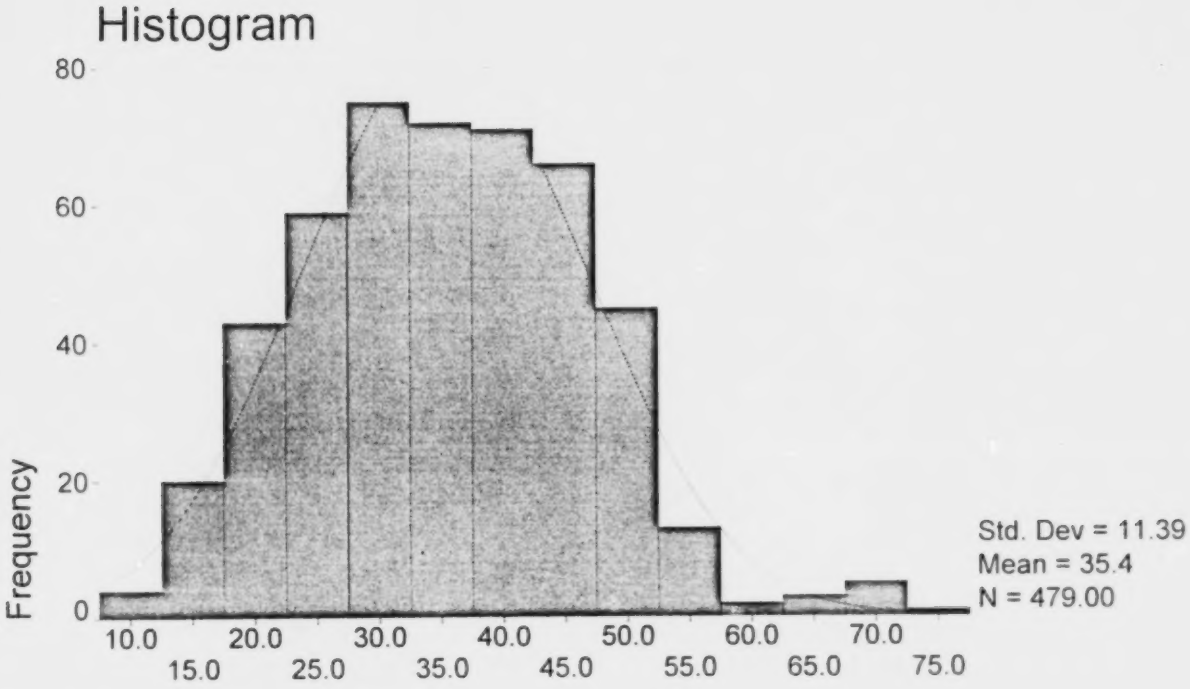


Math 2 Elem Alg plus interaction q9 and q12

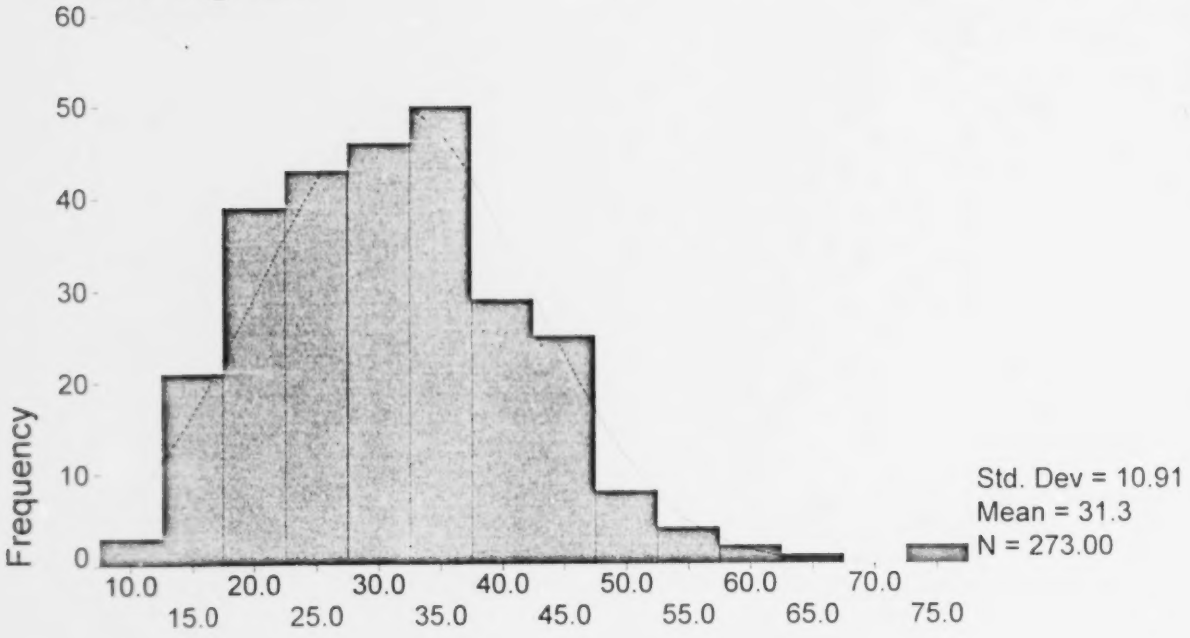


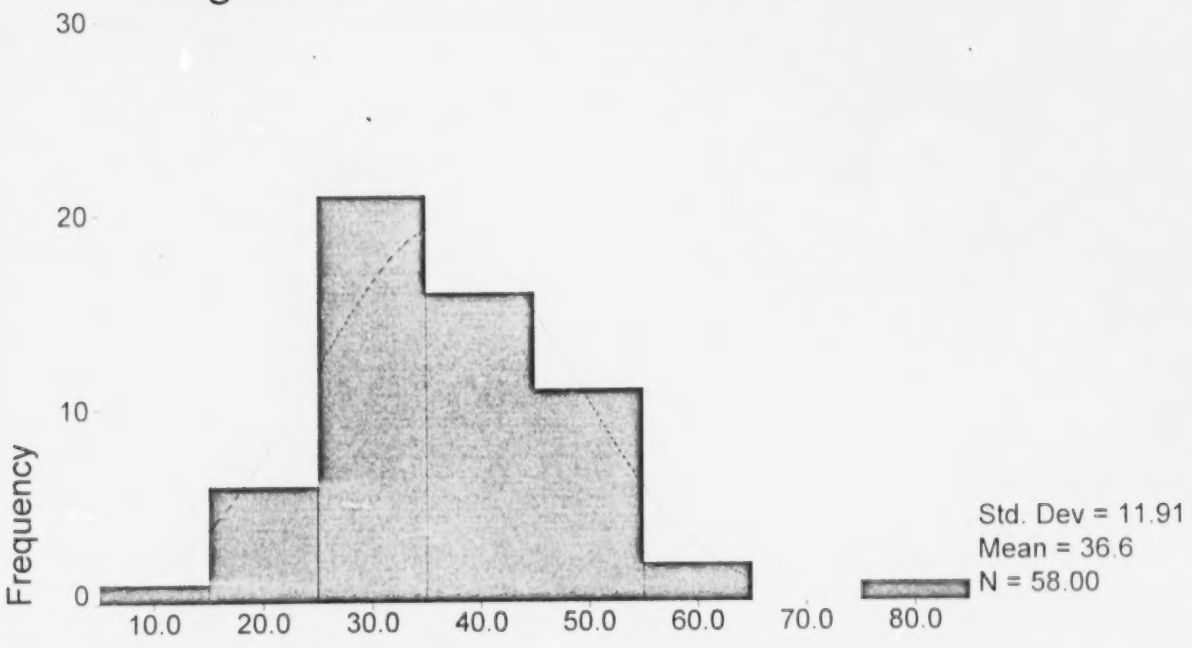
Math 3 Interm Alg plus interaction q9 and q12


Histogram
160
140
120
100
80
60
40
20
0
Frequency
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
80.0
Std. Dev = 12.29
Mean = 38.1
N = 892.00
MDTP 6 plus Inter yrs out of sch and hsgpa

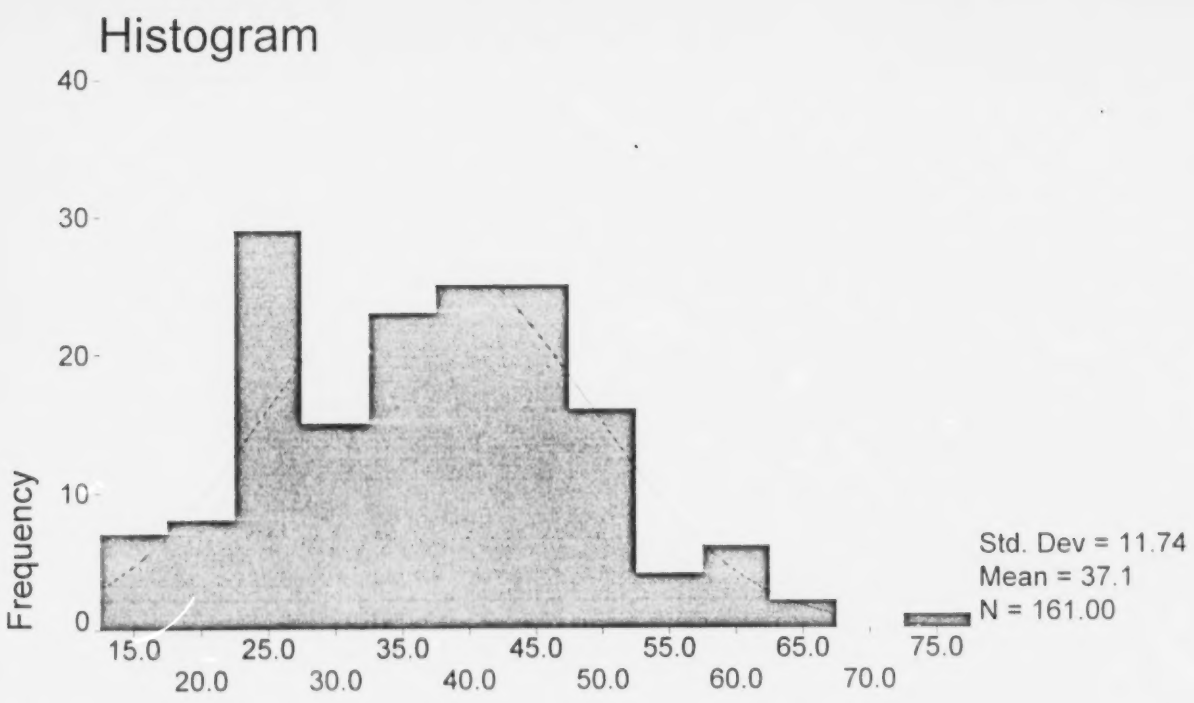


Math9 test plus interaction q9 and q12

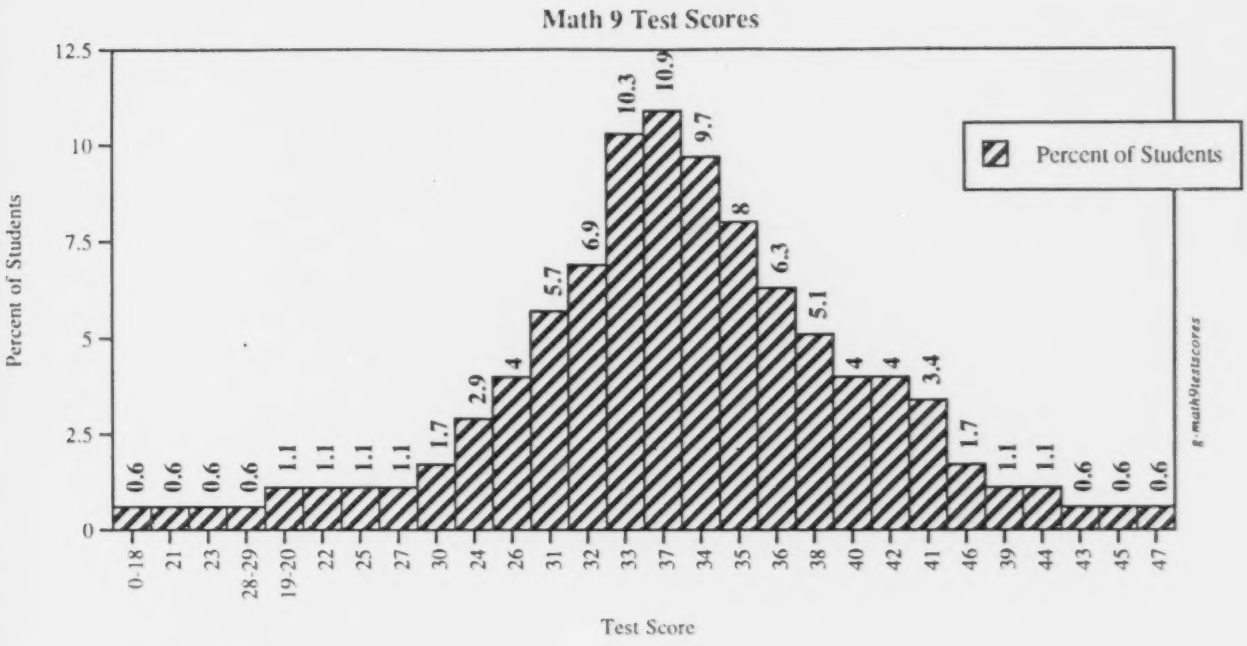

Histogram
60
50
40
30
20
10
0
Frequency
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
50.0
55.0
60.0
65.0
70.0
75.0
Std. Dev = 10.91
Mean = 31.3
N = 273.00
Math10 test plus interaction q9 and q12



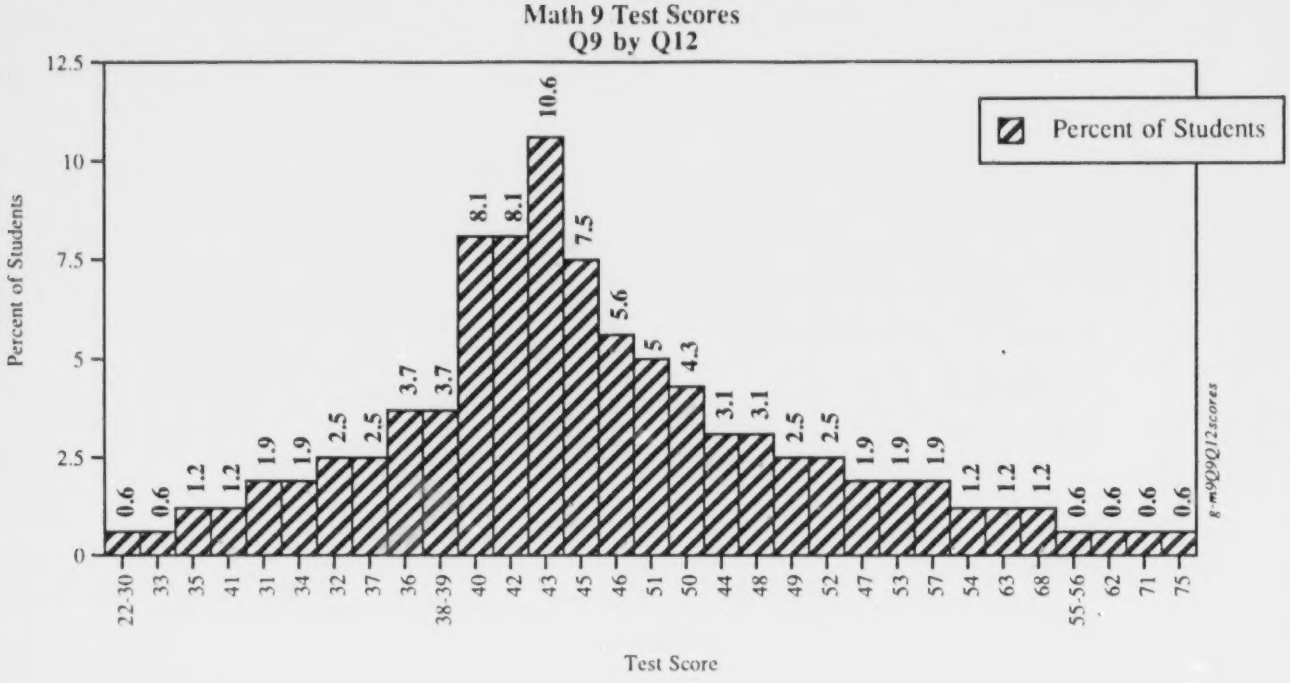
Math 11 Interm Alg Trig plus interaction q9 and q12



Math 12 Precalc plus interaction q9 and q12

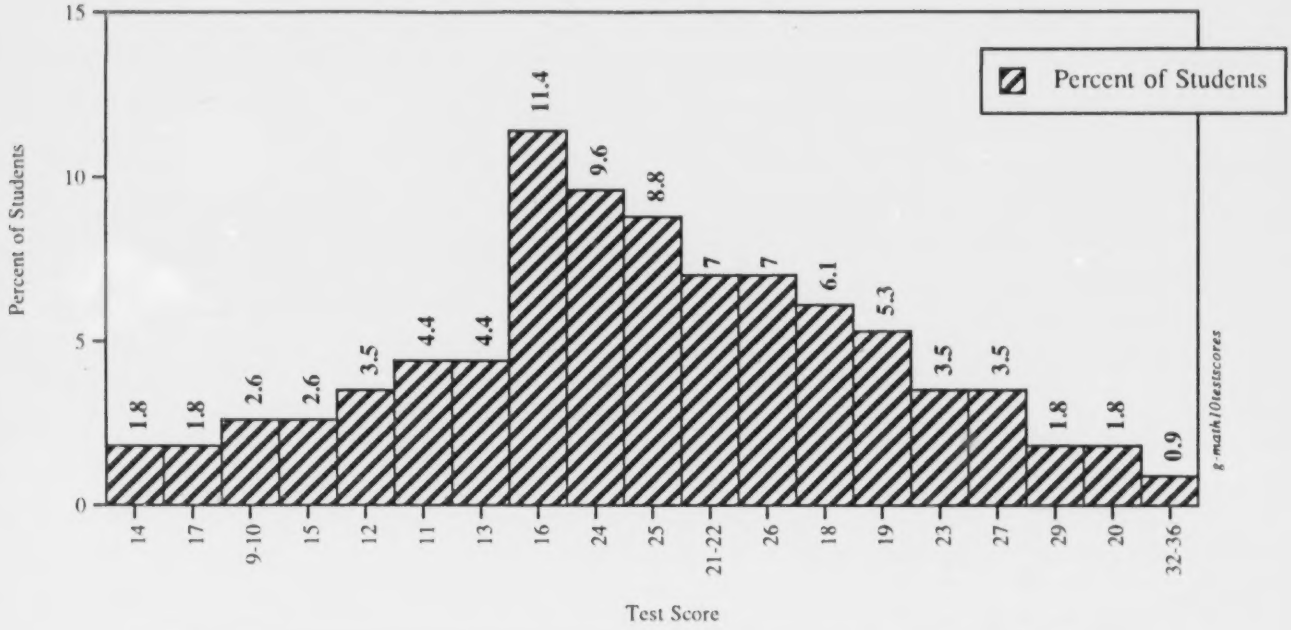


Mean	33.446	Std err	0.517	Median	34
Mode	37	Std dev	6.834	Varance	46.697
Minimum	0	Maximum	47		
Percentile	Value	Percentile	Value	Percentile	Value
25.00	31.000	50.00	34.000	75.00	37.000
Valid cases	175	Missing cases	207		

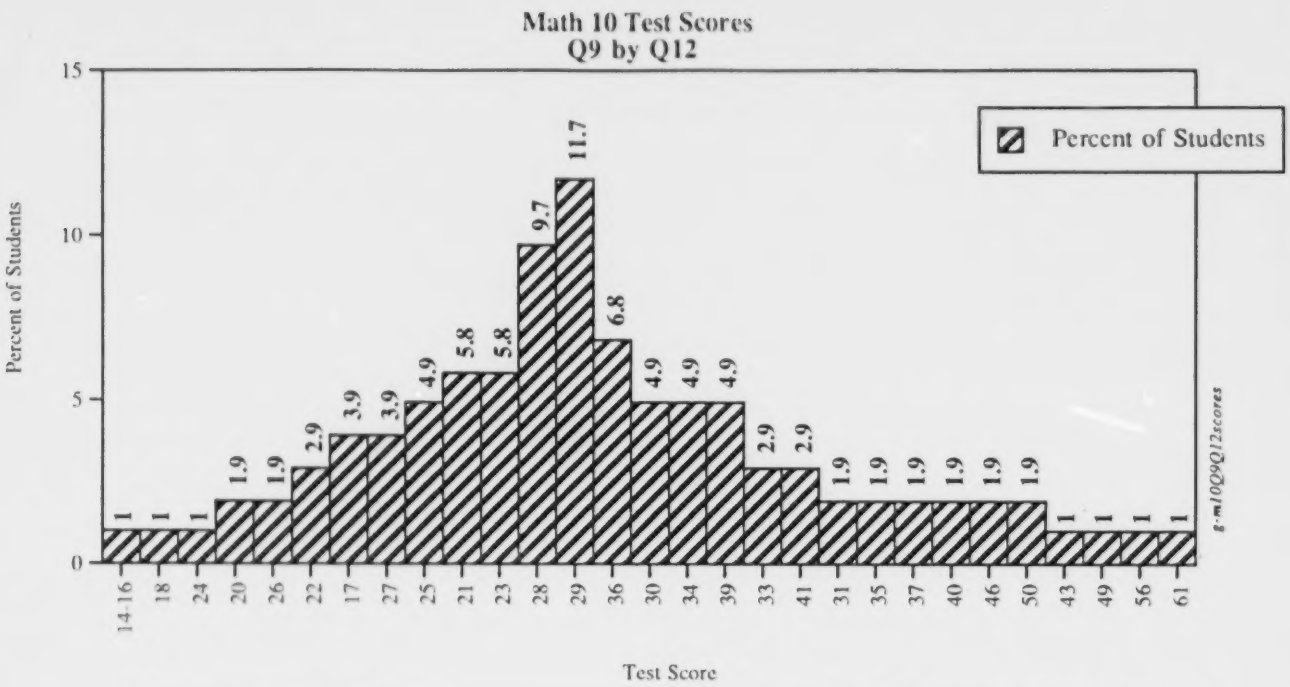


Mean	43.758	Std err	.672	Median	43.000
Mode	43.000	Std dev	8.521	Variance	72.610
Minimum	22.000	Maximum	75.000		
Percentile	Value	Percentile	Value	Percentile	Value
25.00	39.000	50.00	43.000	75.00	78.500
Valid Cases	161	Missing Cases	221		

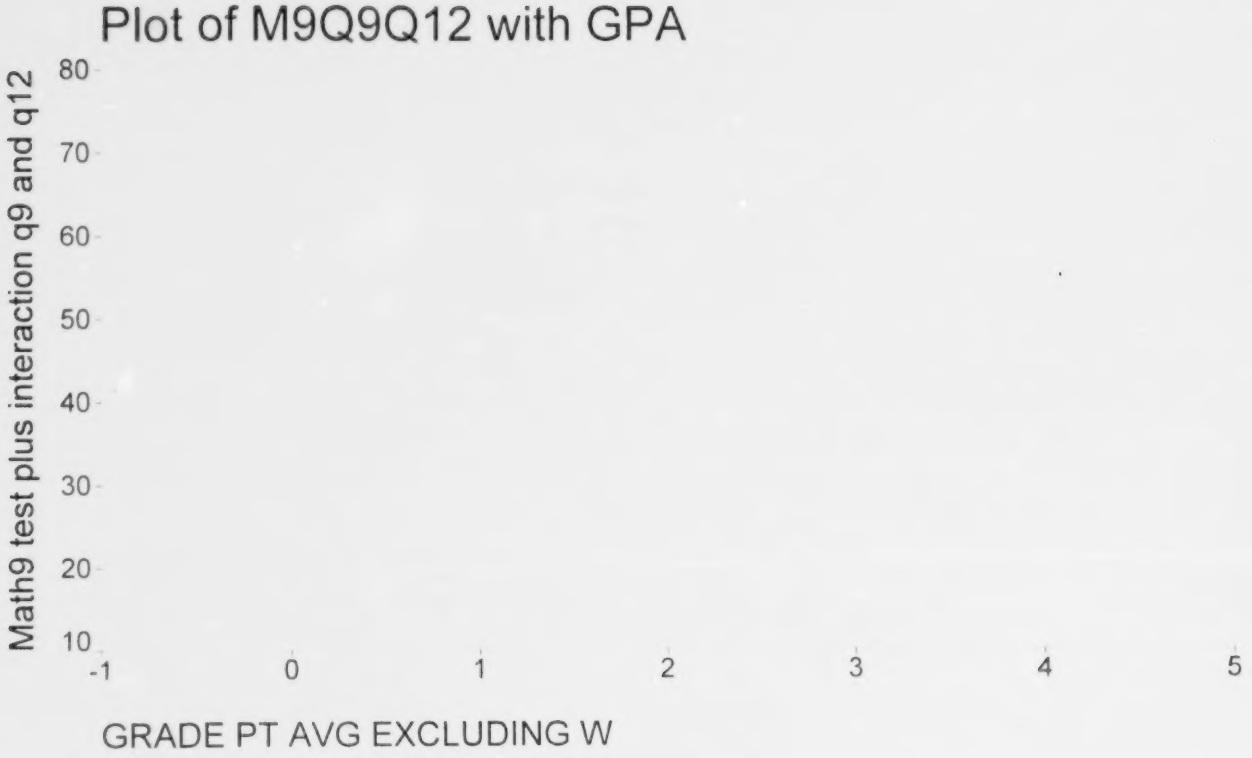
Math 10 Test Scores

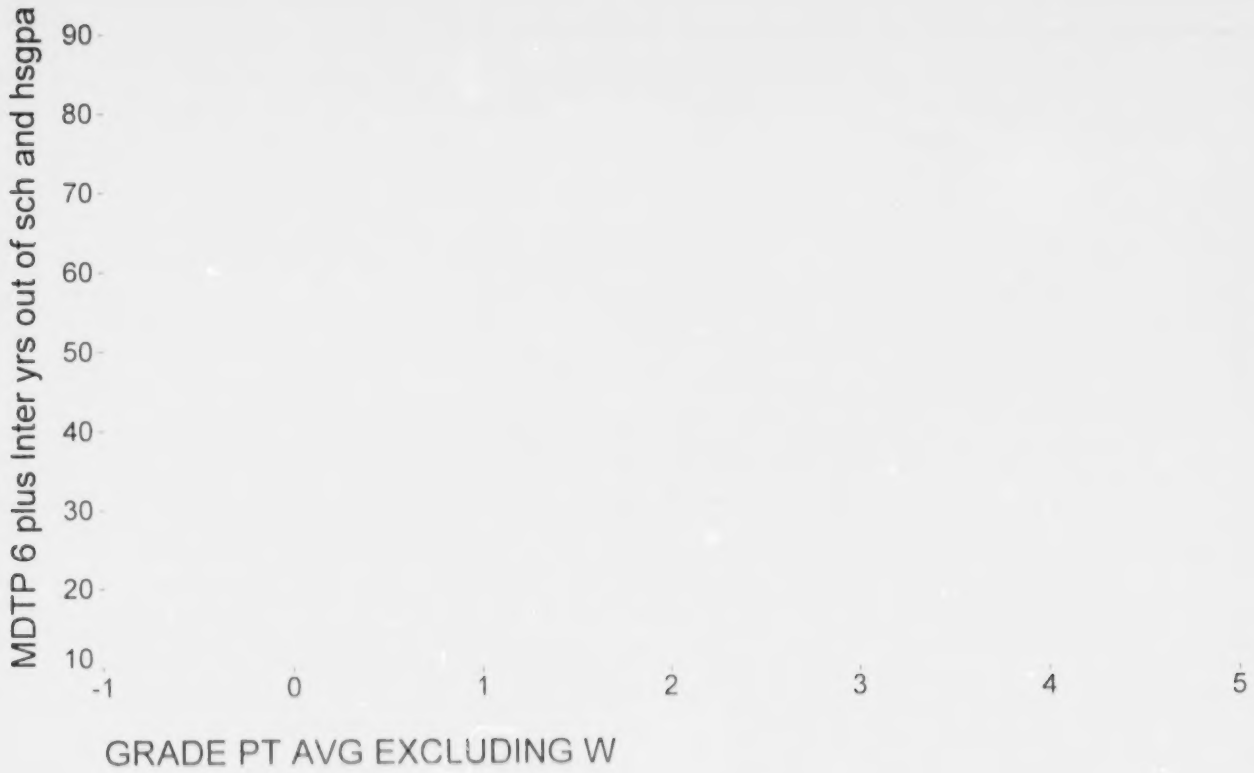


Mean	19.991	Std err	.549	Median	21.000
Mode	16.000	Std dev	5.867	Variance	34.416
Minimum	9.000	Maximum	36.000		
	-				
Percentile	Value	Percentile	Value	Percentile	Value
25	16	50	21	75	24.25
Valid Cases	114	Missing Cases	268		



Mean	30.233	Std err	.867	Median	29.000
Mode	29.000	Std dev	8.801	Variance	77.455
Minimum	14.000	Maximum	61.000		
Percentile	Value	Percentile	Value	Percentile	Value
25.00	24.000	50.00	29.000	75.00	36.000
Valid Cases	103	Missing Cases	279		


Plot of M9Q9Q12 with GPA
Math9 test plus interaction q9 and q12
80
70
60
50
40
30
20
10
-1
0
1
2
3
4
5
GRADE PT AVG EXCLUDING W


MDTP 6 plus Inter yrs out of sch and hsgpa
90
80
70
60
50
40
30
20
10
-1
0
1
2
3
4
5
GRADE PT AVG EXCLUDING W

ENRLSTAT ENROLLMENT STATUS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
FIRST TIME	1	2294	55.9	55.9	55.9
TRANSFER	2	270	6.6	6.6	62.5
RET TRANS	3	27	.7	.7	63.1
RET	4	189	4.6	4.6	67.7
CONT	5	1205	29.4	29.4	97.1
	9	120	2.9	2.9	100.0
	Total	4105	100.0	100.0	

Hi-Res Chart # 121:Histogram of enrollment status

Mean	2.625	Std err	.033	Median	1.000
Mode	1.000	Std dev	2.106	Variance	4.434
Kurtosis	.141	S E Kurt	.076	Skewness	.987
S E Skew	.038	Range	8.000	Minimum	1.000
Maximum	9.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	1.000	20.00	1.000	25.00	1.000
30.00	1.000	40.00	1.000	50.00	1.000
60.00	2.000	70.00	5.000	75.00	5.000
80.00	5.000	90.00	5.000		

Valid cases 4105 Missing cases 0

- -

MATH2COR Elementary Algebra Form C 50 items

Hi-Res Chart # 122:Histogram of elementary algebra form c 50 items

Mean	25.805	Std err	.824	Median	26.000
Mode	29.000	Std dev	10.549	Variance	111.287
Kurtosis	-.887	S E Kurt	.377	Skewness	-.066
S E Skew	.190	Range	43.000	Minimum	3.000
Maximum	46.000				

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MATH2COR Elementary Algebra Form C 50 items

Percentile	Value	Percentile	Value	Percentile	Value
10.00	12.000	20.00	16.000	25.00	17.000
30.00	19.000	40.00	23.000	50.00	26.000
60.00	29.000	70.00	32.500	75.00	34.000
80.00	37.000	90.00	40.500		

Valid cases 164 Missing cases 3941

- -

MATH3COR Intermed Algebra 50 items

Hi-Res Chart # 123:Histogram of intermed algebra 50 items

Mean	22.761	Std err	.666	Median	22.000
Mode	19.000	Std dev	8.404	Variance	70.626
Kurtosis	-.409	S E Kurt	.383	Skewness	.015
S E Skew	.192	Range	39.000	Minimum	2.000
Maximum	41.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	12.000	20.00	16.000	25.00	17.000
30.00	18.000	40.00	20.000	50.00	22.000
60.00	25.000	70.00	27.000	75.00	29.000
80.00	30.000	90.00	34.000		

Valid cases 159 Missing cases 3946

- -

MATH4COR Inter Alg Trig 60 items

Hi-Res Chart # 124:Histogram of inter alg trig 60 items

Mean	32.000	Std err	1.422	Median	32.500
Mode	30.000	Std dev	8.044	Variance	64.710
Kurtosis	1.206	S E Kurt	.809	Skewness	-.548
S E Skew	.414	Range	38.000	Minimum	11.000
Maximum	49.000				

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MATH4COR Inter Alg Trig 60 items

Percentile	Value	Percentile	Value	Percentile	Value
10.00	18.100	20.00	27.200	25.00	30.000
30.00	30.000	40.00	31.200	50.00	32.500
60.00	33.800	70.00	35.000	75.00	35.750
80.00	38.400	90.00	42.100		

Valid cases 32 Missing cases 4073

- -

MATH5COR Precalculus 40 items

Hi-Res Chart # 125:Histogram of precalculus 40 items

Mean	21.636	Std err	.879	Median	20.000
Mode	20.000	Std dev	7.144	Variance	51.035
Kurtosis	-.565	S E Kurt	.582	Skewness	.198
S E Skew	.295	Range	31.000	Minimum	6.000
Maximum	37.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	12.700	20.00	15.400	25.00	16.000
30.00	17.000	40.00	20.000	50.00	20.000
60.00	23.000	70.00	25.000	75.00	27.000
80.00	28.000	90.00	32.000		

Valid cases 66 Missing cases 4039

- -

MATH6COR Alg Readiness 50 items

Hi-Res Chart # 126:Histogram of alg readiness 50 items

Mean	24.897	Std err	.227	Median	25.000
Mode	21.000	Std dev	9.737	Variance	94.810
Kurtosis	-.681	S E Kurt	.114	Skewness	.046
S E Skew	.057	Range	50.000	Minimum	.000
Maximum	50.000				

BEST COPY AVAILABLE

MATH6COR Alg Readiness 50 items

Percentile	Value	Percentile	Value	Percentile	Value
10.00	12.000	20.00	16.000	25.00	18.000
30.00	19.000	40.00	22.000	50.00	25.000
60.00	28.000	70.00	31.000	75.00	32.000
80.00	34.000	90.00	38.000		

Valid cases 1840 Missing cases 2265

- -

MATH9COR Elementary Alg 50 items

Hi-Res Chart # 127:Histogram of elementary alg 50 items

Mean	24.809	Std err	.324	Median	25.000
Mode	27.000	Std dev	9.571	Variance	91.600
Kurtosis	-.675	S E Kurt	.165	Skewness	-.020
S E Skew	.083	Range	47.000	Minimum	.000
Maximum	47.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	12.000	20.00	16.000	25.00	17.000
30.00	19.000	40.00	22.000	50.00	25.000
60.00	27.000	70.00	30.800	75.00	33.000
80.00	34.000	90.00	37.000		

Valid cases 873 Missing cases 3232

- -

MATH10CO Interm Alg 45 items

Hi-Res Chart # 128:Histogram of interm alg 45 items

Mean	21.136	Std err	.387	Median	20.000
Mode	16.000	Std dev	8.778	Variance	77.055
Kurtosis	-.522	S E Kurt	.215	Skewness	.263
S E Skew	.108	Range	43.000	Minimum	.000
Maximum	43.000				

BEST COPY AVAILABLE

MATH10CO Interm Alg 45 items

Percentile	Value	Percentile	Value	Percentile	Value
10.00	10.000	20.00	13.000	25.00	14.000
30.00	16.000	40.00	18.000	50.00	20.000
60.00	23.000	70.00	25.000	75.00	28.000
80.00	29.000	90.00	33.000		

Valid cases 515 Missing cases 3590

- -

MATH11CO Interm Alg Trig form a 60 items

Hi-Res Chart # 129:Histogram of interm alg trig form a 60 items

Mean	28.557	Std err	.985	Median	28.000
Mode	32.000	Std dev	10.568	Variance	111.688
Kurtosis	-.349	S E Kurt	.447	Skewness	.232
S E Skew	.226	Range	49.000	Minimum	7.000
Maximum	56.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	15.000	20.00	19.000	25.00	21.000
30.00	22.000	40.00	25.000	50.00	28.000
60.00	32.000	70.00	34.000	75.00	35.000
80.00	37.000	90.00	42.000		

Valid cases 115 Missing cases 3990

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NEWQ15 Grade recd last math class recoded

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
F	1.00	48	1.2	1.5	1.5
D	2.00	395	9.6	12.6	14.1
C	3.00	1171	28.5	37.3	51.4
B	4.00	992	24.2	31.6	82.9
A	5.00	537	13.1	17.1	100.0
	.	962	23.4	Missing	
	Total	4105	100.0	100.0	

Hi-Res Chart # 130:Histogram of grade recd last math class recoded

Mean	3.501	Std err	.017	Median	3.000
Mode	3.000	Std dev	.967	Variance	.935
Kurtosis	-.548	S E Kurt	.087	Skewness	-.107
S E Skew	.044	Range	4.000	Minimum	1.000
Maximum	5.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	2.000	20.00	3.000	25.00	3.000
30.00	3.000	40.00	3.000	50.00	3.000
60.00	4.000	70.00	4.000	75.00	4.000
80.00	4.000	90.00	5.000		

Valid cases 3143 Missing cases 962

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Q9BYQ12 Interaction of yrs out of school and hsg

Hi-Res Chart # 131:Histogram of interaction of yrs out of school and hsgpa

Mean	12.653	Std err	.149	Median	10.000
Mode	6.000	Std dev	8.460	Variance	71.573
Kurtosis	.467	S E Kurt	.086	Skewness	1.108
S E Skew	.043	Range	40.000	Minimum	2.000
Maximum	42.000				

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Q9BYQ12 Interaction of yrs out of school and hsg

Percentile	Value	Percentile	Value	Percentile	Value
10.00	5.000	20.00	6.000	25.00	6.000
30.00	6.000	40.00	8.000	50.00	10.000
60.00	12.000	70.00	15.000	75.00	18.000
80.00	20.000	90.00	25.000		

Valid cases 3224 Missing cases 881

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MTHBYGRD Interaction of Mth grade and mth class

Hi-Res Chart # 132:Histogram of interaction of mth grade and mth class

Mean	16.396	Std err	.153	Median	15.000
Mode	12.000	Std dev	8.494	Variance	72.155
Kurtosis	-.148	S E Kurt	.088	Skewness	.689
S E Skew	.044	Range	39.000	Minimum	1.000
Maximum	40.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	6.000	20.00	9.000	25.00	9.000
30.00	10.000	40.00	12.000	50.00	15.000
60.00	18.000	70.00	20.000	75.00	21.000
80.00	24.000	90.00	28.000		

Valid cases 3102 Missing cases 1003

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M2Q9Q12 Math 2 Elem Alg plus interaction q9 and

Hi-Res Chart # 133:Histogram of math 2 elem alg plus interaction q9 and q12

Mean	36.164	Std err	1.165	Median	36.000
Mode	36.000	Std dev	12.220	Variance	149.331
Kurtosis	1.120	S E Kurt	.457	Skewness	.426
S E Skew	.230	Range	74.000	Minimum	8.000
Maximum	82.000				

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M2Q9Q12 Math 2 Elem Alg plus interaction q9 and

Percentile	Value	Percentile	Value	Percentile	Value
10.00	21.000	20.00	26.200	25.00	27.750
30.00	29.300	40.00	34.000	50.00	36.000
60.00	38.000	70.00	43.000	75.00	44.000
80.00	46.000	90.00	50.000		

Valid cases 110 Missing cases 3995

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M2Q14Q15 Math 2 Elem Alg plus interaction q14 and

Hi-Res Chart # 134:Histogram of math 2 elem alg plus interaction q14 and q15

Mean	41.762	Std err	1.446	Median	42.000
Mode	44.000	Std dev	14.818	Variance	219.587
Kurtosis	-.559	S E Kurt	.467	Skewness	.113
S E Skew	.236	Range	62.000	Minimum	14.000
Maximum	76.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	21.000	20.00	29.000	25.00	31.500
30.00	33.800	40.00	37.000	50.00	42.000
60.00	44.000	70.00	49.200	75.00	52.500
80.00	55.800	90.00	61.400		

Valid cases 105 Missing cases 4000

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M3Q9Q12 Math 3 Interm Alg plus interaction q9 an

Hi-Res Chart # 135:Histogram of math 3 interm alg plus interaction q9 and q12

Mean	34.534	Std err	.944	Median	34.500
Mode	35.000	Std dev	10.167	Variance	103.364
Kurtosis	1.301	S E Kurt	.446	Skewness	.526
S E Skew	.225	Range	60.000	Minimum	12.000
Maximum	72.000				

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M3Q9Q12 Math 3 Interm Alg plus interaction q9 an

Percentile	Value	Percentile	Value	Percentile	Value
10.00	23.000	20.00	26.000	25.00	27.250
30.00	29.000	40.00	32.000	50.00	34.500
60.00	36.000	70.00	39.900	75.00	41.000
80.00	43.000	90.00	45.300		

Valid cases 116 Missing cases 3989

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M3Q14Q15 Math 3 Interm Alg plus interaction q14 a

Hi-Res Chart # 136:Histogram of math 3 interm alg plus interaction q14 and q15

Mean	44.681	Std err	1.130	Median	44.000
Mode	52.000	Std dev	12.012	Variance	144.290
Kurtosis	.313	S E Kurt	.451	Skewness	.281
S E Skew	.227	Range	66.000	Minimum	15.000
Maximum	81.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	29.400	20.00	34.800	25.00	35.000
30.00	38.200	40.00	40.600	50.00	44.000
60.00	49.000	70.00	51.800	75.00	52.000
80.00	53.200	90.00	59.800		

Valid cases 113 Missing cases 3992

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M4Q9Q12 Math 4 Interm Alg Trig plus interaction

Hi-Res Chart # 137:Histogram of math 4 interm alg trig plus interaction q9 and

Mean	43.828	Std err	1.611	Median	44.000
Mode	48.000	Std dev	8.673	Variance	75.219
Kurtosis	.293	S E Kurt	.845	Skewness	.305
S E Skew	.434	Range	39.000	Minimum	25.000
Maximum	64.000				

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M4Q9Q12 Math 4 Interm Alg Trig plus interaction

Percentile	Value	Percentile	Value	Percentile	Value
10.00	33.000	20.00	36.000	25.00	37.000
30.00	39.000	40.00	41.000	50.00	44.000
60.00	46.000	70.00	48.000	75.00	48.000
80.00	50.000	90.00	56.000		

Valid cases 29 Missing cases 4076

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M4Q14Q15 Math 4 Interm Alg Trig plus interaction

Hi-Res Chart # 138:Histogram of math 4 interm alg trig plus interaction q14 and

Mean	58.538	Std err	1.500	Median	58.500
Mode	50.000	Std dev	7.648	Variance	58.498
Kurtosis	-.631	S E Kurt	.887	Skewness	-.035
S E Skew	.456	Range	31.000	Minimum	43.000
Maximum	74.000				

* Multiple modes exist. The smallest value is shown.

Percentile	Value	Percentile	Value	Percentile	Value
10.00	48.700	20.00	50.400	25.00	51.750
30.00	53.200	40.00	56.800	50.00	58.500
60.00	60.400	70.00	62.900	75.00	66.000
80.00	66.600	90.00	68.000		

Valid cases 26 Missing cases 4079

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M5Q9Q12 Math5 Precalc plus interaction q9 and q1

Hi-Res Chart # 139:Histogram of math5 precalc plus interaction q9 and q12

Mean	36.000	Std err	1.383	Median	36.000
Mode	38.000	Std dev	9.173	Variance	84.140
Kurtosis	-.039	S E Kurt	.702	Skewness	.327
S E Skew	.357	Range	39.000	Minimum	19.000
Maximum	58.000				

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M5Q9Q12 Math5 Precalc plus interaction q9 and q1

Percentile	Value	Percentile	Value	Percentile	Value
10.00	24.000	20.00	28.000	25.00	28.000
30.00	30.500	40.00	34.000	50.00	36.000
60.00	38.000	70.00	41.000	75.00	42.750
80.00	44.000	90.00	46.500		

Valid cases 44 Missing cases 4061

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M5Q14Q15 Math 5 Precalc plus interaction q14 and

Hi-Res Chart # 140:Histogram of math 5 precalc plus interaction q14 and q15

Mean	47.674	Std err	1.989	Median	48.000
Mode	48.000	Std dev	13.045	Variance	170.177
Kurtosis	.189	S E Kurt	.709	Skewness	.023
S E Skew	.361	Range	59.000	Minimum	18.000
Maximum	77.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	30.000	20.00	39.200	25.00	41.000
30.00	42.200	40.00	45.000	50.00	48.000
60.00	49.400	70.00	51.800	75.00	56.000
80.00	57.000	90.00	67.000		

Valid cases 43 Missing cases 4062

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M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg

Hi-Res Chart # 141:Histogram of mdtp 6 plus inter yrs out of sch and hsgpa

Mean	39.674	Std err	.338	Median	39.000
Mode	40.000	Std dev	13.079	Variance	171.071
Kurtosis	.069	S E Kurt	.126	Skewness	.353
S E Skew	.063	Range	81.000	Minimum	7.000
Maximum	88.000				

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M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg

Percentile	Value	Percentile	Value	Percentile	Value
10.00	23.000	20.00	28.000	25.00	30.000
30.00	33.000	40.00	36.000	50.00	39.000
60.00	42.000	70.00	46.000	75.00	48.000
80.00	50.000	90.00	57.000		

Valid cases 1498 Missing cases 2607

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M6Q14Q15 MDTP 6 plus int hi mth grd and hi mth cl

Hi-Res Chart # 142:Histogram of mdtp 6 plus int hi mth grd and hi mth class

Mean	37.139	Std err	.326	Median	37.000
Mode	32.000	Std dev	12.457	Variance	155.174
Kurtosis	-.116	S E Kurt	.128	Skewness	.267
S E Skew	.064	Range	77.000	Minimum	6.000
Maximum	83.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	22.000	20.00	26.000	25.00	28.000
30.00	30.000	40.00	33.000	50.00	37.000
60.00	40.000	70.00	43.000	75.00	46.000
80.00	47.000	90.00	54.000		

Valid cases 1460 Missing cases 2645

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M9Q9Q12 Math9 test plus interaction q9 and q12

Hi-Res Chart # 143:Histogram of math9 test plus interaction q9 and q12

Mean	36.140	Std err	.457	Median	36.000
Mode	40.000	Std dev	11.903	Variance	141.686
Kurtosis	.136	S E Kurt	.187	Skewness	.327
S E Skew	.094	Range	72.000	Minimum	7.000
Maximum	79.000				

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M9Q9Q12 Math9 test plus interaction q9 and q12

Percentile	Value	Percentile	Value	Percentile	Value
10.00	21.000	20.00	25.000	25.00	27.000
30.00	30.000	40.00	33.000	50.00	36.000
60.00	40.000	70.00	42.000	75.00	44.000
80.00	46.000	90.00	51.000		

Valid cases 678 Missing cases 3427

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M10Q9Q12 Math10 test plus interaction q9 and q12

Hi-Res Chart # 144:Histogram of math10 test plus interaction q9 and q12

Mean	30.998	Std err	.544	Median	30.000
Mode	29.000	Std dev	10.945	Variance	119.795
Kurtosis	.799	S E Kurt	.242	Skewness	.686
S E Skew	.121	Range	64.000	Minimum	10.000
Maximum	74.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	17.000	20.00	21.000	25.00	23.000
30.00	24.800	40.00	27.000	50.00	30.000
60.00	33.000	70.00	36.000	75.00	38.000
80.00	40.000	90.00	45.000		

Valid cases 405 Missing cases 3700

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M9Q14Q15 Math9 test plus interaction q14 and q15

Hi-Res Chart # 145:Histogram of math9 test plus interaction q14 and q15

Mean	41.967	Std err	.518	Median	42.000
Mode	34.000	Std dev	13.323	Variance	177.490
Kurtosis	-.316	S E Kurt	.190	Skewness	.215
S E Skew	.095	Range	72.000	Minimum	10.000
Maximum	82.000				

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M11Q9Q12 Math 11 Interm Alg Trig plus interaction

Percentile	Value	Percentile	Value	Percentile	Value
10.00	22.000	20.00	27.000	25.00	28.000
30.00	29.000	40.00	31.800	50.00	36.000
60.00	38.400	70.00	41.000	75.00	43.250
80.00	45.000	90.00	49.300		

Valid cases 86 Missing cases 4019

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M12Q9Q12 Math 12 Precalc plus interaction q9 and

Hi-Res Chart # 148:Histogram of math 12 precalc plus interaction q9 and q12

Mean	36.813	Std err	.673	Median	36.000
Mode	33.000	Std dev	11.318	Variance	128.096
Kurtosis	-.019	S E Kurt	.289	Skewness	.385
S E Skew	.145	Range	63.000	Minimum	10.000
Maximum	73.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	24.000	20.00	26.000	25.00	28.000
30.00	31.000	40.00	33.000	50.00	36.000
60.00	38.400	70.00	42.000	75.00	45.000
80.00	46.000	90.00	51.000		

Valid cases 283 Missing cases 3822

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M11Q1415 Math 11 Interm Alg Trig plus interaction

Hi-Res Chart # 149:Histogram of math 11 interm alg trig plus interaction q14 an

Mean	50.904	Std err	1.565	Median	50.000
Mode	50.000	Std dev	14.257	Variance	203.259
Kurtosis	-.010	S E Kurt	.523	Skewness	.022
S E Skew	.264	Range	74.000	Minimum	17.000
Maximum	91.000				

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M11Q1415 Math 11 Interm Alg Trig plus interaction

Percentile	Value	Percentile	Value	Percentile	Value
10.00	31.400	20.00	38.000	25.00	43.000
30.00	44.400	40.00	48.000	50.00	50.000
60.00	53.400	70.00	60.800	75.00	63.000
80.00	63.200	90.00	68.600		

Valid cases 83 Missing cases 4022

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M12Q1415 Math 12 Precalc plus interaction q14 and

Hi-Res Chart # 150:Histogram of math 12 precalc plus interaction q14 and q15

Mean	52.196	Std err	.765	Median	54.000
Mode	61.000	Std dev	12.685	Variance	160.903
Kurtosis	-.377	S E Kurt	.293	Skewness	-.280
S E Skew	.147	Range	67.000	Minimum	12.000
Maximum	79.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	35.000	20.00	41.000	25.00	43.000
30.00	44.000	40.00	50.000	50.00	54.000
60.00	56.000	70.00	60.200	75.00	61.000
80.00	63.000	90.00	68.000		

Valid cases 275 Missing cases 3830

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M9Q14Q15 Math9 test plus interaction q14 and q15

Percentile	Value	Percentile	Value	Percentile	Value
10.00	25.000	20.00	29.000	25.00	32.000
30.00	34.000	40.00	37.800	50.00	42.000
60.00	46.000	70.00	49.000	75.00	51.500
80.00	53.000	90.00	60.000		

Valid cases 661 Missing cases 3444

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M10Q1415 Math10 test plus interaction q14 and q15

Hi-Res Chart # 146:Histogram of math10 test plus interaction q14 and q15

Mean	41.335	Std err	.636	Median	41.000
Mode	50.000	Std dev	12.664	Variance	160.385
Kurtosis	-.406	S E Kurt	.244	Skewness	.118
S E Skew	.122	Range	63.000	Minimum	14.000
Maximum	77.000				

Percentile	Value	Percentile	Value	Percentile	Value
10.00	24.000	20.00	30.000	25.00	32.000
30.00	35.000	40.00	38.000	50.00	41.000
60.00	45.000	70.00	48.000	75.00	50.000
80.00	52.000	90.00	58.000		

Valid cases 397 Missing cases 3708

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M11Q9Q12 Math 11 Interm Alg Trig plus interaction

Hi-Res Chart # 147:Histogram of math 11 interm alg trig plus interaction q9 and

Mean	36.093	Std err	1.254	Median	36.000
Mode	41.000	Std dev	11.629	Variance	135.238
Kurtosis	2.285	S E Kurt	.514	Skewness	.780
S E Skew	.260	Range	71.000	Minimum	13.000
Maximum	84.000				

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Appendix C

Descriptive and Correlational Statistics of MDTP Test Scores and CAPP Survey Questions with Criterion Variables

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Math Assessment Correlations
(Means & Standard Deviations)

Prepared by : Research & Planning

Math 035 Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Q25: How important is it to the people closest to you that you go to college?	543	2.67	.56
Q26: How important is college to you personally?	542	2.90	.28
Q27: Is English the language you speak, read, and write most of the time?	577	1.22	.41
Q9 by Q12:	531	12.89	8.25
Q9 X's Q15	505	9.19	6.25
Math 6 + Q9 X's Q12	404	35.75	9.98
Math 6 + Q14 X's Q15	387	33.17	7.86
Math 9 + Q9 X's Q12	95	27.78	9.94
Math 9 + Q14 X's Q15	95	31.23	9.61
Math 10 + Q9 X's Q12	32	24.12	9.98
Math 10 + Q14 X's Q15	29	29.00	11.77
GPA	348	2.38	1.19
MOD GPA	470	1.76	1.46
GPAW	470	2.50	1.80
GPA5	470	1.76	1.46

Correlation Matrices

Math 035	GPA	GPAW	GPA5	MOD GPA
Math 6 Correlation / Algebra Readiness (form not specified)	.1920 (264) p = .001	.1654 (361) p = .001	.1526 (361) p = .002	.1654 (361) p = .001
Math 9 Correlation / Elementary Algebra Form A	.2717 (64) p = .015	.2040 (81) p = .034	.1737 (81) p = .060	.2040 (81) p = .034
Math 10 Correlation / Intermediate Algebra Form A	.6487 (14) p = .006	.5380 (18) p = .011	.4861 (18) p = .020	.5380 (18) p = .011
Q3: Is English your first (primary) language?	.0934 (335) p = .044	.1674 (455) p = .000	.1730 (455) p = .000	.1674 (455) p = .000
Q4: Do you have a verified learning disability (i.e., dyslexia)?	.0941 (326) p = .045	.1014 (440) p = .017	.0992 (440) p = .019	.1014 (440) p = .017

Math 035 Correlation Matrices (Cont.)

Math 035	GPA	GPAW	GPA5	MOD GPA
White / Non-White	- .1522 (320) p = .003	- .0640 (436) p = .091	- .0434 (436) p = .183	- .0640 (436) p = .091
Q5: What is your admission status at this college?	.0460 (341) p = .198	.0360 (461) p = .221	.0312 (461) p = .252	.0360 (461) p = .221
Q6: Are you a veteran?	- .0749 (293) p = .100	.0041 (392) p = .467	. 195 (392) p = .350	.0041 (392) p = .467
Q7: High School Education	.0741 (332) p = .089	.0224 (449) p = .318	.0109 (449) p = .409	.0224 (449) p = .318
Q8: Highest college degree or certificate earned?	.0278 (301) p = .315	.0059 (410) p = .453	.0014 (410) p = .489	.0059 (410) p = .453
Q9: How long have you been out of school? (do not include summer)	.2498 (326) p = .000	.1501 (443) p = .001	.1216 (443) p = .005	.1501 (443) p = .001
Q10: How many yrs. of Engl. have you completed in H.S. (excluding ESL)	- .1229 (314) p = .015	- .1015 (429) p = .018	- .0907 (429) p = .030	- .1015 (429) p = .018
New Q11: What grade did you receive in the last English class you completed?	.1384 (287) p = .009	.0840 (393) p = .048	.0682 (393) p = .089	.0840 (393) p = .048
High School GPA	.1231 (312) p = .015	.1443 (424) p = .001	.1404 (424) p = .002	.1443 (424) p = .001
Q14: What is the highest level math class you have completed?	.1279 (320) p = .011	.0917 (435) p = .028	0785 (435) p = .051	0917 (435) p = .028
New Q15: What grade did you receive in the last math class you completed?	.0611 (297) p = .147	.0662 (405) p = .092	.0638 (405) p = .100	.0662 (405) p = .092
Q16: How long ago did you complete your last math class?	.1812 (318) p = .001	.0915 (435) p = .029	.0681 (433) p = .078	.0915 (433) p = .029
Q17: Plan to attend (days, eves, days and eves)?	.1518 (322) p = .003	.0958 (438) p = .022	.0792 (438) p = .049	.0958 (438) p = .022
Q18: Number of college units planned for next term?	- .0040 (301) p = .472	.0070 (410) p = .444	.0089 (410) p = .429	.0070 (410) p = .444
Q19: Number of employment hours planned while enrolled?	.0679 (301) p = .120	.0046 (408) p = .463	- .0086 (408) p = .431	.0046 (408) p = .463
Q23: How definite is your choice of major?	.0386 (265) p = .266	.0576 (361) p = .137	.0583 (361) p = .135	.0576 (361) p = .137

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Math 6 / Alg. Read. (not spec.)	460	21.95	5.67
Math 9 / Elem. Alg. (form A)	112	16.34	6.08
Math 10 / Inter. Alg. (form A)	34	13.20	6.31
Q3: Is English your first (primary) language?	592	1.33	.47
Q4: Do you have a verified learning disability? (i.e., dyslexia)?	576	1.95	.20
White / Non-White	564	.70	.45
Q5: What is your admission status at this college?	600	1.03	.22
Q6: Are you a veteran?	509	1.94	.30
Q7: High School Education	582	3.05	.99
Q8: Highest college degree or certificate earned?	530	1.16	.75
Q9: How long have you been out of school?	572	2.92	1.72
Q10: How long have you been out of school?	548	4.22	1.19
New Q11: What grade did you receive in the last English class you completed?	497	3.52	.81
High school GPA	547	4.63	1.11
Q14: What is the highest level math class you have completed?	560	3.58	1.28
NewQ15: What grade did you receive in last math class completed?	513	3.18	.86
Q16: How long ago did you complete your last math class?	549	3.13	1.30
Q17: Plan to attend (days, eves, days and eves)?	567	1.61	.82
Q18: Number of college units planned for next term?	528	3.03	1.11
Q19: Number of employment hours planned while enrolled?	523	3.09	1.54
Q23: How definite is your choice of major	463	1.98	.83

Positional index

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Math 035 Correlation Matrices (Cont.)

Q25: How important is it to the people closest to you that you go to college?	- .1094 (312) p = .027	- .0303 (424) p = .267	- .0127 (424) p = .397	- .0303 (434) p = .267
Q26: How important is college to you personally?	.0347 (311) p = .271	- .0180 (423) p = .356	- .0283 (423) p = .281	- .0180 (423) p = .356
Q27: Is English the language you speak, read, and write most of the time?	.1694 (325) p = .001	.2238 (443) p = .000	.2203 (443) p = .000	.2238 (443) p = .000
Q9 by Q12: How long have you been out of school by High School GPA	.2729 (302) p = .000	.1968 (413) p = .000	.1692 (413) p = .000	.1968 (413) p = .000
Q9 X's Q15: How long have you been out of school? X's What grade did you receive in you last completed math class?	.2619 (219) p = .000	.1641 (397) p = .001	.1346 (397) p = .004	.1641 (397) p = .001
Math 6 + Q9 X's Q12	.3888 (233) p = .000	.2760 (321) p = .000	.2364 (321) p = .000	.2760 (321) p = .000
Math 6 + Q14 X's Q15	.2257 (227) p = .000	.1965 (311) p = .000	.1830 (311) p = .001	.1965 (311) p = .000
Math 9 + Q9 X's Q12	.4048 (50) p = .002	.3730 (66) p = .001	.3458 (66) p = .002	.3730 (66) p = .001
Math 9 + Q14 X's Q15	.2772 (53) p = .022	.2294 (68) p = .030	.2044 (68) p = .047	.2294 (68) p = .030
Math 10 + Q9 X's Q12	.7080 (14) p = .002	.6057 (18) p = .004	.5358 (18) p = .011	.6057 (18) p = .004
Math 10 + Q14 X's Q15	.4334 (13) p = .070	.3211 (16) p = .113	.2771 (16) p = .149	.3211 (16) p = .113

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Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Math 2 / Elem. Alg. (form C)	25	23.32	5.14
Math 3 / Inter. Alg. (form C)	20	16.65	5.58
Math 6 / Alg Readiness (form not specified)	344	33.25	7.64
Math 9 / Elem. Alg (form A)	213	22.13	6.37
Math 10 / Inter Alg (form A)	56	18.73	7.58
Math 12 / Precalc. (form A)	13	15.76	7.70
NewQ12: HS GPA	574	3.14	1.11
NewQ15: What grade did you receive in last math class completed?	555	3.34	.93
Q9: How long have you been out of school?	600	2.55	1.64
Q9 by Q12:	560	11.54	7.67
Math by Grade	548	14.81	5.80
Math 6 + Q9 X's Q12	313	45.76	10.88
Math 9 + Q9 X's Q12	190	32.68	9.61
Math 10 + Q9 X's Q12	41	28.97	13.84
Math 6 + Q14* X's Q15	309	47.07	9.57
Math 9 + Q14 X's Q15	187	37.88	9.12
Math 10 + Q14 X's Q15	44	37.04	8.91
GPA	410	2.63	1.17
MOD GPA	503	2.15	1.47
GPAW	501	2.15	1.47
GPA5	501	2.97	1.76

* = *Q14: What is the highest level math class you have completed?*

Correlation Matrices

Math 054	GPA	MOD GPA	GPAW	GPA5
Math 2 Correlation / Elementary Algebra Form C	.4471 (22) p = .018	.3512 (24) p = .046	.3512 (24) p = .046	.3130 (24) p = .068
Math 3 Correlation / Intermediate Algebra Form C	.0750 (14) p = .399	- .1821 (16) p = .250	- .1821 (16) p = .250	- .2205 (16) p = .506
Math 6 Correlation / Algebra Readiness (form not specified)	.1802 (210) p = .004	.1569 (276) p = .005	.1558 (275) p = .005	.1434 (275) p = .009
Math 9 Correlation / Elementary Algebra Form A	.3227 (134) p = .000	.4068 (158) p = .000	.4020 (157)) p = .000	.4027 (157) p = .000

Math 054 Correlation Matrices (Cont.)

Math 054	GPA	MOD GPA	GPAW	GPA5
Math 10 Correlation / Intermediate Algebra Form A	.4250 (40) p = .003	.4395 (43) p = .002	.4395 (43) p = .002	.4206 (43) p = .002
Math 12 Correlation / Pre-calculus Form A	.4344 (9) p = .121	.4344 (9) p = .121	.4344 (9) p = .121	.4344 (9) p = .121
New Q12: What is your high school grade point average?	- .2396 (370) p = .000	- .2449 (456) p = .000	- .2441 (454) p = .000	- .2324 (454) p = .000
New Q15: What grade did you receive in the last math class you completed?	.2193 (360) p = .000	.1870 (442) p = .000	.1855 (440) p = .000	.1677 (440) p = .000
Q9: How long have you been out of school? (do not count or include summer)	.2285 (382) p = .000	.1650 (471) p = .000	.1622 (469) p = .000	.1393 (469) p = .001
Q9 by Q12: How long have you been out of school by HS GPA	.2584 (355) p = .000	.2693 (437) p = .000	.2673 (435) p = .000	.2541 (435) p = .000
Math 6 + Q9 X's Q12	.2547 (195) p = .000	.1924 (253) p = .001	.1900 (252) p = .001	.1664 (252) p = .004
Math 9 + Q9 X's Q12	.4511 (121) p = .000	.4274 (144) p = .000	.4207 (143) p = .000	.3941 (143) p = .000
Math 10 + Q9 X's Q12	.5370 (30) p = .001	.5588 (33) p = .000	.5588 (33) p = .000	.5345 (33) p = .001
Math 6 + Q14 X's Q15	.2625 (191) p = .001	.2195 (250) p = .000	.2177 (249) p = .000	.1976 (249) p = .001
Math 9 + Q14 X's Q15	.3885 (119) p = .000	.4012 (140) p = .000	.3941 (139) p = .000	.3770 (139) p = .000
Math 10 + Q14 X's Q15	.5299 (32) p = .001	.6219 (35) p = .000	.6219 (35) p = .000	.6214 (35) p = .000

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Math 2 / Elem. Alg. (form C)	35	34.48	7.48
Math 3 / Inter. Alg. (form C)	38	21.92	5.09
Math 9 / Elem. Alg (form A)	175	33.44	6.83
Math 10 / Inter Alg (form A)	114	19.99	5.86
Q3: Is English your first (primary) language?	355	1.40	.49
Q4: Do you have a verified learning disability? (i.e., dyslexia)?	347	2.00	.00
White / Non-White	354	.72	.44
Q5: What is your admission status at this college?	361	1.01	.12
Q6: Are you a veteran?	319	2.01	.19
Q7: High School Education	360	2.82	.97
Q8: Highest college degree or certificate earned?	336	1.11	.63
Q9: How long have you been out of school?	349	2.18	1.48
Q10: How long have you been out of school?	343	4.36	1.15
New Q11: What grade did you receive in the last English class you completed?	306	3.81	.78
High school GPA	334	5.32	.99
Q14: What is the highest level math class you have completed?	343	5.29	1.31
NewQ15: What grade did you receive in last math class completed?	318	3.54	.93
Q16: How long ago did you complete your last math class?	338	2.43	1.11
Q17: Plan to attend (days, eves, days and eves)?	353	1.55	.83
Q18: Number of college units planned for next term?	342	3.41	.86
Q19: Number of employment hours planned while enrolled?	335	3.02	1.40
Q23: How definite is your choice of major	300	2.06	.77

Math 100 Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Q25: How important is it to the people closest to you that you go to college?	335	2.74	.49
Q26: How important is college to you personally?	336	2.91	.31
Q27: Is English the language you speak, read, and write most of the time?	356	1.31	.46
Q9 bv Q12:	327	10.59	7.16
Q9 X's Q15	311	7.06	5.32
Math 2 + Q9 X's Q12	25	45.80	10.23
Math 3 + Q9 X's Q12	26	35.26	7.66
Math 9 + Q9 X's Q12	161	43.75	8.52
Math 10 + Q9 X's Q12	103	30.23	8.80
Math 2 + Q14 X's Q15	26	55.42	10.07
Math 3 + Q14 X's Q15	26	42.07	8.99
Math 9 + Q14 X's Q15	157	52.96	9.44
Math 10 + Q14 X's Q15	98	39.65	9.36
GPA	248	2.61	1.19
MOD GPA	296	2.18	1.45
GPAW	296	2.18	1.45
GPA5	296	3.02	1.72

Correlation Matrices

Math 100	GPA	MOD GPA	GPAW	GPA5
Math 2 Correlation / Elementary Algebra Form C	.0565 (26) p = .392	.2383 (30) p = .102	.2383 (30) p = .102	.2606 (30) p = .082
Math 3 Correlation / Intermediate Algebra Form C	.1697 (30) p = .185	.1697 (30) p = .185	.1697 (30) p = .185	.1697 (30) p = .185
Math 9 Correlation / Elementary Algebra Form A	.1427 (108) p = .070	.2197 (135) p = .005	.2197 (135)) p = .005	.2296 (135) p = .004
Math 10 Correlation / Intermediate Algebra Form A	.3673 (77) p = .001	.3086 (93) p = .001	.3086 (93) p = .001	.2779 (93) p = .004

Math 100 Correlation Matrices (Cont.)

Math 100	GPA	MOD GPA	GPAW	GPA5
Q3: Is English you first (primary) language?	.0949 (202314) p = .075	.1486 (277) p = .007	.1520 (277) p = .006	.1486 (277) p = .007
Q4: Do you have a verified learning disability (i.e., dyslexia)?	.* (224) p = .	.* (270) p = .	.* (270) p = .	.* (270) p = .
White / Non-White	- .0546 (225) p = .208	.0485 (268) p = .215	.0690 (268) p = .130	.0485 (268) p = .215
Q5: What is your admission status at this college?	.1094 (238) p = .046	- .0161 (284) p = .393	- .0372 (284) p = .266	- .0161 (284) p = .393
Q6: Are you a veteran?	- .0233 (207) p = .370	- .0345 (247) p = .295	- .0348 (247) p = .293	- .0345 (247) p = .295
Q7: High school education.	.0783 (235) p = .116	- .0298 (281) p = .310	- .0521 (281) p = .192	- .0298 (281) p = .310
Q8: Highest college degree or certificate earned?	.1057 (218) p = .060	- .0088 (264) p = .443	- .0309 (264) p = .309	- .0088 (264) p = .443
Q9: How long have you been out of school? (do not count or include summer)	.3048 (230) p = .000	.2528 (273) p = .000	.2241 (273) p = .000	.2528 (273) p = .000
Q10: How many years of English have you completed in HS (do not include ESL)	- .1933 (230) p = .000	- .2263 (268) p = .000	- .2189 (268) p = .000	- .2263 (268) p = .000
New Q11: What grade did you receive in the last English class you completed?	.0826 (200) p = .122	.0828 (244) p = .099	.0780 (244) p = .112	.0828 (244) p = .099
High School GPA	.2107 (216) p = .001	.2616 (216) p = .000	.2579 (261) p = .000	.2616 (261) p = .000
Q14: What is the highest level math class you have completed?	.0800 (223) p = .117	.0563 (268) p = .179	.0472 (268) p = .221	.0563 (268) p = .179
New Q15: What grade did you receive in the last math class you completed?	.1302 (204) p = .032	.1308 (248) p = .020	.1308 (248) p = .020	.1232 (248) p = .026
Q16: How log ago did you complete your last math class?	.1777 (220) p = .004	.0988 (264) p = .055	.0743 (264) p = .114	.0988 (264) p = .055
Q17: Plan to attend: (days, eves, days and eves)?	.0954 (232) p = .074	.1535 (278) p = .005	.1576 (278) p = .004	.1535 (278) p = .005

Math 100 Correlation Matrices (Cont.)

Math 100	GPA	MOD GPA	GPAW	GPA5
Q18: Number of college units planned for next term?	.1562 (222) p = .010	.1563 (268) p = .005	.1493 (268) p = .007	.1563 (268) p = .005
Q19: Number of employment hours planned while enrolled?	- .1056 (221) p = .059	- .1878 (264) p = .001	- .1960 (264) p = .001	- .1878 (264) p = .001
Q23: How definite is your choice of major?	- .0845 (196) p = .119	- .0189 (235) p = .387	- .0025 (235) p = .485	- .0189 (235) p = .387
Q25: How important is it to the people closest to you that you go to college?	- .0463 (218) p = .248	- .0334 (262) p = .295	- .0284 (262) p = .323	- .0334 (262) p = .295
Q26: How important is college to you personally?	- .0189 (222) p = .390	.0462 (265) p = .227	.0583 (265) p = .172	.0462 (265) p = .227
Q27: Is English the language that you speak, read and write most of the time?	.1463 (233) p = .013	.2221 (277) p = .000	.2262 (277) p = .000	.2221 (277) p = .000
Q9 by Q12: How long have you been out of school by HS GPA	.2659 (213) p = .000	.2127 (256) p = .000	.2127 (256) p = .000	.1863 (256) p = .001
Q9 X's Q15: How long have you been out of school? X's What grade did you receive in your last completed math class	.2458 (201) p = .000	.1584 (243) p = .007	.1289 (243) p = .022	.1584 (243) p = .007
Math 2 + Q9 X's Q12	.6097 (20) p = .002	.4774 (24) p = .009	.4217 (24) p = .020	.4774 (24) p = .009
Math 3 + Q9 X's Q12	.5417 (21) p = .006	.5417 (21) p = .006	.5417 (21) p = .006	.5417 (21) p = .006
Math 9 + Q9 X's Q12 90 42	.3598 (100) p = .000	.3703 (124) p = .000	.3703 (124) p = .000	.3543 (124) p = .000
Math 10 + Q9 X's Q12 45 42	.4597 (72) p = .000	.3701 (85) p = .000	.3701 (85) p = .000	.3271 (85) p = .001
Math 2 + Q14 X's Q15	.4380 (20) p = .027	.4537 (24) p = .013	.4274 (24) p = .019	.4537 (24) p = .013
Math 3 + Q14 X's Q15	.4605 (21) p = .018	.4605 (21) p = .018	.4605 (21) p = .018	.4605 (21) p = .018
Math 9 + Q14 X's Q15	.2304 (98) p = .011	.2469 (122) p = .003	.2469 (122) p = .003	.2381 (122) p = .004
Math 10 + Q14 X's Q15	.3971 (66) p = .000	.3810 (80) p = .000	.3810 (80) p = .000	.3528 (80) p = .001

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Math 3 / Inter. Alg. (form C)	14	29.42	3.95
Math 10 / Inter Alg (form A)	45	28.86	6.73
Q3: Is English your first (primary) language?	90	1.44	.49
Q4: Do you have a verified learning disability (i.e., Dyslexia)?	88	2.00	.00
White / Non-White	85	.74	.44
Q5: What is your admission status at this college?	91	1.01	.10
Q6: Are you a veteran?	77	2.00	.00
Q7: High School Education	89	1.10	.53
Q8: Highest college degree or certificate earned	84	2.67	.99
Q9: How long have you been out of school (Do not count or include summer)	86	1.83	1.05
Q10: How many years of English have you complete in HS? (do not include ESL)	82	4.28	1.13
New Q11: What grade did you receive in the last English class you completed?	74	3.87	.87
High School GPA	83	5.71	1.01
Q14: What is the highest level math class you have completed?	87	5.85	1.46
New Q15: What grade did you receive in the last math class you completed?	80	4.02	.77
Q16: How long ago did you complete your last math class?	83	2.10	1.02
Q17: Plan to Attend (days, eves, days & eves)	87	1.81	.94
Q18: Number of college units planned for next term?	80	3.41	.92
Q19: Number of employment hours planned while enrolled?	84	2.65	1.34
Q23: How definite is your choice of major?	79	2.15	.83
Q25: How important is it to the people closest to you that you go to college?	83	2.72	.52

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Q26: How important is college to you personally?	83	2.89	.31
Q27: Is English the language you speak, read, & write most of the time?	86	1.29	.45
Q9 by Q12: How long have you been out of school by HS GPA	80	9.66	5.21
Q9 by Q15: How long have you been out of school by last grade received in math	76	7.17	4.44
GPA	55	2.76	1.03
GPAW	76	2.00	1.52
GPA5	76	2.72	1.90
MOD GPA	76	2.00	1.52

Correlation Matrices

Math 104	GPA	GPAW	GPA5	MOD GPA
Math 3 Correlation / Intermediate Algebra Form C	.1028 (12) p = .375	.0945 (13) p = .379	.0871 (13) p = .389	.0945 (13) p = .379
Math 10 Correlation / Intermediate Algebra Form A	.0183 (25) p = .465	- .0147 (35) p = .467	- .0134 (35) p = .470	- .0147 (35) p = .467
Math 12 Correlation / Pre-calculus Form A	.5004 (9) p = .085	.4979 (10) p = .072	.4657 (10) p = .087	.4979 (10) p = .072
Q3: Is English your first (primary) language?	.2966 (52) p = .016	.2140 (73) p = .035	.1902 (73) p = .054	.2140 (73) p = .035
Q4: Do you have a verified learning disability (i.e., dyslexia)?	.* (52) p = .	.* (73) p = .	.* (73) p = .	.* (73) p = .
White / Non-White	.0218 (52) p = .439	.0772 (70) p = .263	.0810 (70) p = .253	.0772 (70) p = .263
Q5: What is your admission status at this college?	.* (53) p = .	.* (74) p = .	.* (74) p = .	.* (74) p = .
Q6: Are you a veteran?	.* (46) p = .	.* (63) p = .	.* (63) p = .	- .1479 (18) p = .279

** = " . " is printed if a coefficient cannot be computed*

Math 104 Correlation Matrices (cont.)

Math 104	GPA	GPAW	GPA5	MOD GPA
Q7: High School education:	.2574 (52) p = .033	.2368 (73) p = .022	.2226 (73) p = .029	.2368 (73) p = .022
Q8: Highest college degree or certificate earned.	.1343 (48) p = .181	- .1094 (69) p = .186	- .1291 (69) p = .145	- .1094 (69) p = .186
Q9: How long have you been out of school? (do not count or include summer)	.4483 (50) p = .001	.3175 (71) p = .003	.2783 (71) p = .009	.3175 (71) p = .003
Q10: How many years of English have you completed in HS (do not include ESL)	- .3534 (48) p = .007	- .2809 (68) p = .010	- .2508 (68) p = .020	- .2809 (68) p = .010
New Q11: What grade did you receive in the last English class you completed?	- .0030 (42) p = .492	.3364 (62) p = .004	.3675 (62) p = .002	.3364 (62) p = .004
High School GPA	.1201 (45) p = .216	.4153 (66) p = .000	.4374 (66) p = .000	.4153 (66) p = .000
Q14: What is the highest level math class you have completed?	- .1347 (51) p = .216	- .0559 (71) p = .322	- .0392 (71) p = .373	- .0559 (71) p = .322
New Q15: What grade did you receive in the last math class you complete?	.4042 (46) p = .003	.3628 (66) p = .001	.3396 (66) p = .003	.3628 (66) p = .001
Q16: How long ago did you complete your last math class?	.4125 (48) p = .002	.1162 (69) p = .171	.0664 (69) p = .294	.1162 (69) p = .171
Q17: Plan to attend: (days, eves., days & eves.)	- .0524 (50) p = .359	.0089 (71) p = .471	- .0021 (71) p = .493	- .0089 (71) p = .471
Q18: Number of college units planned for next term?	.0248 (47) p = .434	- .1619 (65) p = .099	- .1801 (65) p = .076	- .1619 (65) p = .099
Q19: Number of employment hours planned while enrolled?	- .2119 (49) p = .072	- .0077 (68) p = .475	.0249 (68) p = .420	- .0077 (68) p = .475
Q23: How definite is your choice of major?	- .3074 (44) p = .021	- .2053 (63) p = .053	- .1806 (63) p = .078	- .2053 (63) p = .053
Q25: How important is it to the people closest to you that you go to college?	- .0446 (47) p = .383	- .2425 (67) p = .024	- .2570 (67) p = .018	- .2425 (67) p = .024
Q26: How important is college to you personally?	- .1229 (47) p = .205	- .0386 (67) p = .378	- .0245 (67) p = .422	- .0386 (67) p = .378

Math 104 Correlation Matrices (cont.)

Math 104	GPA	GPAW	GPA5	MOD GPA
Q27: Is English the language that you speak, read and write most of the time?	.3343 (50) p = .009	.2262 (71) p = .029	.1970 (71) p = .050	.2262 (71) p = .029
Q9 by Q12: How long have you been out of school by HS GPA	.3801 (44) p = .005	.3596 (65) p = .002	.3315 (65) p = .003	.3596 (65) p = .002
Q9 X's Q15: How long have you been out of school? X's What grade did you receive in your last completed math class	.4158 (44) p = .002	.3358 (64) p = .003	.3000 (64) p = .008	.3358 (64) p = .003

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Math 10 / Int. Alg (form A)	20	28.80	7.39
Math 12 / Precalc. (form A)	28	24.82	6.01
Q3: Is English you first (primary) language?	56	1.66	.47
Q4: Do you have a verified learning disability (i.e., Dyslexia)?	54	2.00	.00
White / Non-White	55	.78	.41
Q5: What is your admission status at this college?	56	1.03	.18
Q6: Are you a veteran?	50	2.00	.00
Q7: High School Education	56	2.94	1.05
Q8: Highest college degree or certificate earned	51	1.11	.71
Q9: How long have you been out of school (Do not count or include summer)	55	2.27	1.40
Q10: How many years of English have you complete in HS? (do not include ESL)	49	4.04	1.32
New Q11: What grade did you receive in the last English class you completed?	43	4.37	.61
New Q12: What is your high school grade point average?	51	1.74	.86
High School GPA	51	6.25	.86
Q14: What is the highest level math class you have completed?	52	6.17	1.67
New Q15: What grade did you receive in the last math class you completed?	52	4.34	.65
Q16: How long ago did you complete your last math class?	52	2.55	1.36
Q17: Plan to Attend (days, eves, days & eves)	53	1.66	.89
Q18: Number of college units planned for next term?	51	3.82	.47
Q19: Number of employment hours planned while enrolled?	48	2.62	1.40
Q23: How definite is your choice of major?	49	1.55	.79
Q25: How important is it to the people closest to you that you go to college?	51	2.74	.59

Means and Standard Deviations

Test	Cases	Mean	Stndrd. Dev.
Q26: How important is college to you personally?	51	2.96	.19
Q27: Is English the language you speak, read, & write most of the time?	54	1.46	.50
Math by Grade	52	26.96	8.86
Q9 by Q12: How long have you been out of school by HS GPA	51	13.60	9.41
Q9 X's Q15: How long have you been out of school X's last grade received in math	52	10.40	6.73
Math 10 + Q9 X's Q12	20	38.15	10.79
Math 10 + Q14 X's Q15	17	52.00	10.22
Math 12 + Q9 X's Q12	20	41.95	12.06
Math 12 + Q14 X's Q15	24	54.87	9.82
GPA	28	2.82	1.02
GPAW	31	2.54	1.28
GPA5	31	3.45	1.50
MOD GPA	31	2.54	1.28

Correlation Matrices

Math 119	GPA	GPAW	GPA5	MOD GPA
Math 10 Correlation / Intermediate Algebra Form A	.5911 (11) p = .028	.4433 (12) p = .074	.3712 (12) p = .117	.4433 (12) p = .074
Math 12 Correlation / Pre-calculus Form A	.3325 (12) p = .146	.0531 (13) p = .432	.4657 (10) p = .087	.4979 (10) p = .072
Q3: Is English your first (primary) language?	.0000 (27) p = .500	.1374 (30) p = .234	.1595 (30) p = .200	.1374 (30) p = .234
Q4: Do you have a verified learning disability (i.e., dyslexia)?	.* (27) p = .	.* (30) p = .	.* (30) p = .	.* (30) p = .
White / Non-White	.0612 (25) p = .386	.0259 (28) p = .448	.00180810 (28) p = .464	.0259 (28) p = .448
Q5: What is your admission status at this college?	- .0791 (27) p = .348	.0000 (30) p = .500	.0181 (30) p = .462	.0000 (30) p = .500

** = " . " is printed if a coefficient cannot be computed*

Math 119 Correlation Matrices (cont.)

Math 119	GPA	GPAW	GPA5	MOD GPA
Q6: Are you a veteran?	.* (23) p = .	.* (26) p = .	.* (26) p = .	-.1479 (26) p = .279
Q7: High School education:	.0306 (27) p = .440	.0757 (30) p = .345	.0813 (30) p = .335	.0757 (30) p = .345
Q8: Highest college degree or certificate earned.	.0439 (27) p = .414	.0657 (29) p = .367	.0673 (29) p = .364	.0657 (29) p = .367
Q9: How long have you been out of school? (do not count or include summer)	.4520 (27) p = .009	.3571 (30) p = .026	.3152 (30) p = .045	.3571 (30) p = .026
Q10: How many years of English have you completed in HS (do not include ESL)	-.0118 (25) p = .478	-.1055 (27) p = .300	-.1291 (27) p = .260	-.1055 (27) p = .300
New Q11: What grade did you receive in the last English class you completed?	.4002 (21) p = .036	.0912 (23) p = .340	.0088 (23) p = .484	.0912 (23) p = .340
New Q12: What is your high school grade point average?	.4397 (26) p = .012	-.3888 (2[illegible] p = .0[illegible]	-.3888 (28) p = .020	-.3523 (28) p = .033
High School GPA	.4397 (26) p = .012	.3888 (28) p = .020	.3523 (28) p = .033	.3888 (28) p = .020
Q14: What is the highest level math class you have completed?	.2047 (27) p[illegible] = .153	-.0252 (30) p = .447	-.0745 (30) p = .348	-.0252 (30) p = .447
New Q15: What grade did you receive in the last math class you complete?	.3849 (27) p = .153	.3507 (30) p = .029	.3259 (30) p = .039	.3507 (30) p = .029
Q16: How long ago did you complete your last math class?	.3239 (27) p = .050	.2354 (30) p = .105	.2057 (30) p = .138	.2354 (30) p = .105
Q17: Plan to attend: (days, eves., days & eves.)	.4076 (27) p = .017	.2246 (29) p = .121	.1705 (29) p = .188	.2246 (29) p = .121
Q18: Number of college units planned for next term?	-.0492 (26) p = .406	.1585 (28) p = .210	.1920 (28) p = .164	.1585 (28) p = .210
Q19: Number of employment hours planned while enrolled?	.2242 (26) p = .135	-.0258 (28) p = .448	-.0770 (28) p = .348	-.0258 (28) p = .448
Q23: How definite is your choice of major?	-.1572 (25) p = .226	-.1250 (28) p = .263	-.1120 (28) p = .285	-.1250 (28) p = .263

** = " . " is printed if a coefficient cannot be computed*

Math 119 Correlation Matrices (cont.)

Math 119	GPA	GPAW	GPA5	MOD GPA
Q25: How important is it to the people closest to you that you go to college?	- .0546 (26) p = .296	- .1119 (28) p = .285	- .1169 (28) p = .277	- .1119 (28) p = .285
Q26: How important is college to you personally?	- .0272 (26) p = .447	- .0560 (28) p = .388	- .0586 (28) p = .384	- .0560 (28) p = .388
Q27: Is English the language that you speak, read and write most of the time?	.3930 (26) p = .024	.3153 (29) p = .048	.2795 (29) p = .071	.3153 (29) p = .048
Math by Grade	.3870 (27) p = .023	.1729 (30) p = .180	.1729 (30) p = .180	.1170 (30) p = .269
Q9 by Q12: How long have you been out of school by HS GPA	.4804 (26) p = .006	.4959 (28) p = .004	.4721 (28) p = .006	.4959 (28) p = .004
Q9 X's Q15: How long have you been out of school? X's What grade did you receive in your last completed math class	.5063 (27) p = .004	.3823 (30) p = .019	.3339 (30) p = .036	.3823 (30) p = .019
Math 10 + Q9 X's Q12	.7067 (11) p = .008	.6343 (12) p = .013	.6343 (12) p = .013	.5717 (12) p = .026
Math 10 + Q14 X's Q15	.2425 (11) p = .236	.2249 (12) p = .241	.2249 (12) p = .241	.2047 (12) p = .262
Math 12 + Q9 X's Q12	.7821 (11) p = .002	.7821 (11) p = .002	.7821 (11) p = .002	.7821 (11) p = .002
Math 12 + Q14 X's Q15	.6586 (12) p = .010	.0075 (13) p = .490	.0075 (13) p = .490	- .1015 (13) p = .371

Math 141

CRSE_NUM

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	141	46	100.0	100.0	100.0
	Total	46	100.0	100.0	

Valid cases 46 Missing cases 0

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```
-> CORRELATIONS
->   /VARIABLES= math12co
->    q3 q4 whnonwht
->    q5 q6 q7 q8 q9 q10 newq11 highgpa q14
->   newq15 q16 q17 q18 q19 q23 q25 q26 q27 q9byq12 q9xq15
->   m12q9q12 m12q14i5   with gpa  gpaw
->   gpa5 modgpa
->   /PRINT=ONETAIL SIG
->   /STATISTICS DESCRIPTIVES
->   /MISSING=PAIRWISE .
```

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Variable	Cases	Mean	Std Dev
MATH12CO	31	22.0000	6.0277
Q3	40	1.4750	.5057
Q4	40	2.0000	.0000
WHNONWHT	43	.7209	.4539
Q5	42	1.0000	.0000
Q6	39	2.0000	.0000
Q7	43	3.0930	1.1300
Q8	39	1.1795	.6833
Q9	43	2.4884	1.5942
Q10	36	3.8889	1.5451
NEWQ11	33	3.9394	.8993
HIGHGPA	37	5.9189	.8293
Q14	41	5.8049	1.7638
NEWQ15	37	4.0541	.8481
Q16	40	2.5000	1.1983
Q17	41	1.7805	.9357
Q18	39	3.7179	.6047
Q19	40	2.6000	1.1723
Q23	32	2.1250	.7513
Q25	35	2.7429	.5054
Q26	35	2.9714	.1690
Q27	41	1.5122	.5061
Q9BYQ12	37	14.1892	10.5326
Q9XQ15	37	9.8378	7.7370
M12Q9Q12	25	37.7200	15.7547
M12Q1415	24	45.1667	11.3738
GPA	32	3.0313	1.0621
GPAW	37	2.6216	1.4405
GPA5	37	3.4865	1.7098
MODGPA	37	2.6216	1.4405

- - Correlation Coefficients - -

	GPA	GPAW	GPAS	MODGPA
MATH12CO	.5168	.5550	.5322	.5550
	(21)	(25)	(25)	(25)
	P= .008	P= .002	P= .003	P= .002
Q3	.4256	.4082	.3818	.4082
	(27)	(31)	(31)	(31)
	P= .013	P= .011	P= .017	P= .011
Q4	.	.	.	.
	(28)	(32)	(32)	(32)
	P= .	P= .	P= .	P= .
WHNONWHT	.3820	.3318	.3067	.3318
	(30)	(35)	(35)	(35)
	P= .019	P= .026	P= .037	P= .026
Q5	.	.	.	.
	(30)	(34)	(34)	(34)
	P= .	P= .	P= .	P= .
Q6	.	.	.	.
	(28)	(32)	(32)	(32)
	P= .	P= .	P= .	P= .
Q7	.2513	.3032	.2953	.3032
	(30)	(34)	(34)	(34)
	P= .090	P= .041	P= .045	P= .041
Q8	.2773	.2729	.2540	.2729
	(28)	(32)	(32)	(32)
	P= .077	P= .065	P= .080	P= .065
Q9	.5581	.5233	.4861	.5233
	(30)	(34)	(34)	(34)
	P= .001	P= .001	P= .002	P= .001
Q10	-.1593	-.2683	-.2721	-.2683
	(25)	(29)	(29)	(29)
	P= .223	P= .080	P= .077	P= .080
NEWQ11	-.0880	.0820	.1082	.0820
	(23)	(27)	(27)	(27)
	P= .345	P= .342	P= .296	P= .342

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	GPA	GPAW	GPA5	MODGPA
HIGHGPA	.0000	.2188	.2471	.2188
	(25)	(29)	(29)	(29)
	P= .500	P= .127	P= .098	P= .127
Q14	-.2106	-.2037	-.1888	-.2037
	(29)	(33)	(33)	(33)
	P= .136	P= .128	P= .146	P= .128
NEWQ15	.1721	.4433	.4726	.4433
	(25)	(29)	(29)	(29)
	P= .205	P= .008	P= .005	P= .008
Q16	.6151	.5247	.4750	.5247
	(28)	(32)	(32)	(32)
	P= .000	P= .001	P= .003	P= .001
Q17	.0683	-.1861	-.2213	-.1861
	(29)	(33)	(33)	(33)
	P= .362	P= .150	P= .108	P= .150
Q18	-.0781	.0407	.0593	.0407
	(26)	(30)	(30)	(30)
	P= .352	P= .415	P= .378	P= .415
Q19	-.3228	-.3268	-.3058	-.3268
	(28)	(32)	(32)	(32)
	P= .047	P= .034	P= .044	P= .034
Q23	-.0896	.1514	.1782	.1514
	(23)	(27)	(27)	(27)
	P= .342	P= .225	P= .187	P= .225
Q25	-.3968	-.3994	-.3724	-.3994
	(23)	(27)	(27)	(27)
	P= .030	P= .020	P= .028	P= .020
Q26	-.2211	-.1969	-.1790	-.1969
	(23)	(27)	(27)	(27)
	P= .155	P= .162	P= .186	P= .162
Q27	.5196	.6075	.5910	.6075
	(28)	(32)	(32)	(32)
	P= .002	P= .000	P= .000	P= .000

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

- - Correlation Coefficients - -

	GPA	GPAW	GPAS	MODGPA
Q9BYQ12	.5575	.5208	.4822	.5208
	(25)	(29)	(29)	(29)
	P= .002	P= .002	P= .004	P= .002
Q9XQ15	.5625	.5405	.5033	.5405
	(25)	(29)	(29)	(29)
	P= .002	P= .001	P= .003	P= .001
M12Q9Q12	.5712	.6324	.6081	.6324
	(17)	(20)	(20)	(20)
	P= .008	P= .001	P= .002	P= .001
M12Q14I5	.2873	.5072	.5157	.5072
	(16)	(19)	(19)	(19)
	P= .140	P= .013	P= .012	P= .013

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Math 150

For math 150

Math 150

Variable	Cases	Mean	Std Dev
MATH12CO	47	30.2553	4.9890
Q3	57	1.5789	.4981
Q4	55	2.0000	.0000
WHNONWHT	56	.7679	.4260
Q5	58	1.0172	.1313
Q6	55	2.0000	.0000
Q7	57	2.9649	.7311
Q8	53	1.1698	.8023
Q9	54	2.0741	1.2108
Q10	51	4.0000	1.4422
NEWQ11	48	4.1458	.3503
HIGHGPA	47	6.2553	.9434
Q14	54	7.0926	1.0144
NEWQ15	52	4.1154	.3553
Q16	54	2.2963	1.0925
Q17	57	1.6667	.9322
Q18	55	3.9091	.3482
Q19	55	2.7273	1.1131
Q23	53	1.9811	.7964
Q25	54	2.6111	.6564
Q26	53	2.8302	.4697
Q27	56	1.3750	.4885
Q9BYQ12	47	11.2766	5.2821
Q9XQ15	51	8.0000	4.9031
M12Q9Q12	39	41.2051	8.5968
M12Q14I5	42	58.6190	9.3495
GPA	44	3.3182	.9344
GPAW	48	3.0417	1.2876
GPA5	48	3.9583	1.5012
MODGPA	48	3.0417	1.2876

- - Correlation Coefficients - -

	GPA	GPAW	GPAS	MODGPA
MATH12CO	.1889	.1635	.1484	.1635
	(33)	(37)	(37)	(37)
	P= .146	P= .167	P= .190	P= .167
Q3	.1558	.2344	.2373	.2344
	(41)	(44)	(44)	(44)
	P= .165	P= .063	P= .060	P= .063
Q4	.	.	.	.
	(40)	(43)	(43)	(43)
	P= .	P= .	P= .	P= .
WHNONWHT	.1061	.2783	.2899	.2783
	(41)	(44)	(44)	(44)
	P= .255	P= .034	P= .028	P= .034
Q5	.1195	.1155	.1078	.1155
	(42)	(45)	(45)	(45)
	P= .225	P= .225	P= .240	P= .225
Q6	.	.	.	.
	(40)	(43)	(43)	(43)
	P= .	P= .	P= .	P= .
Q7	.2431	.1643	.1391	.1643
	(41)	(44)	(44)	(44)
	P= .063	P= .143	P= .184	P= .143
Q8	.1048	.1248	.1212	.1248
	(37)	(40)	(40)	(40)
	P= .268	P= .222	P= .228	P= .222
Q9	.3495	.4195	.4102	.4195
	(38)	(41)	(41)	(41)
	P= .016	P= .003	P= .004	P= .003
Q10	-.1241	-.1995	-.2027	-.1995
	(36)	(39)	(39)	(39)
	P= .235	P= .112	P= .108	P= .112
NEWQ11	.4992	.3785	.3352	.3785
	(34)	(37)	(37)	(37)
	P= .001	P= .010	P= .021	P= .010

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

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- - Correlation Coefficients - -

	GPA	GPAW	GPAS	MODGPA
HIGHGPA	.5011	.3108	.2564	.3108
	(32)	(35)	(35)	(35)
	P= .002	P= .035	P= .069	P= .035
Q14	-.0701	-.1034	-.1040	-.1034
	(39)	(42)	(42)	(42)
	P= .336	P= .257	P= .256	P= .257
NEWQ15	.3251	.3122	.2954	.3122
	(37)	(40)	(40)	(40)
	P= .025	P= .025	P= .032	P= .025
Q16	.2827	.3034	.2900	.3034
	(39)	(42)	(42)	(42)
	P= .041	P= .025	P= .031	P= .025
Q17	-.0644	-.0256	-.0169	-.0256
	(41)	(44)	(44)	(44)
	P= .345	P= .435	P= .457	P= .435
Q18	.1085	.0218	.0047	.0218
	(39)	(42)	(42)	(42)
	P= .255	P= .445	P= .488	P= .445
Q19	-.0371	-.0680	-.0704	-.0680
	(40)	(43)	(43)	(43)
	P= .410	P= .332	P= .327	P= .332
Q23	.1275	.0246	.0031	.0246
	(38)	(41)	(41)	(41)
	P= .223	P= .439	P= .492	P= .439
Q25	.1327	-.0193	-.0477	-.0193
	(39)	(42)	(42)	(42)
	P= .210	P= .452	P= .382	P= .452
Q26	-.2039	-.2229	-.2134	-.2229
	(38)	(41)	(41)	(41)
	P= .110	P= .081	P= .090	P= .081
Q27	.3079	.2644	.2420	.2644
	(41)	(44)	(44)	(44)
	P= .025	P= .041	P= .057	P= .041

(Coefficient / (Cases) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

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- - Correlation Coefficients - -

	GPA	GPAW	GPAS	MODGPA
Q9BYQ12	.4841	.5251	.5025	.5251
	(32)	(35)	(35)	(35)
	P= .002	P= .001	P= .001	P= .001
Q9XQ15	.4188	.4638	.4456	.4638
	(36)	(39)	(39)	(39)
	P= .006	P= .001	P= .002	P= .001
M12Q9Q12	.4788	.4930	.4658	.4930
	(27)	(30)	(30)	(30)
	P= .006	P= .003	P= .005	P= .003
M12Q1415	.3076	.3018	.2828	.3018
	(30)	(33)	(33)	(33)
	P= .049	P= .044	P= .055	P= .044

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M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg

55.00	12	.5	1.3	91.6
56.00	11	.5	1.2	92.8
57.00	10	.4	1.1	93.9
58.00	8	.3	.9	94.8
59.00	4	.2	.4	95.3
60.00	5	.2	.6	95.9
61.00	1	.0	.1	96.0
62.00	3	.1	.3	96.3
63.00	3	.1	.3	96.6
64.00	6	.3	.7	97.3
65.00	6	.3	.7	98.0
66.00	4	.2	.4	98.4
67.00	4	.2	.4	98.9
68.00	1	.0	.1	99.0
69.00	1	.0	.1	99.1
70.00	2	.1	.2	99.3
71.00	2	.1	.2	99.6
72.00	2	.1	.2	99.8
74.00	1	.0	.1	99.9
82.00	1	.0	.1	100.0
.	1402	61.1	Missing	
Total	2294	100.0	100.0	

Hi-Res Chart # 9:Histogram of mdtp 6 plus inter yrs out of sch and hsgpa

Mean	38.132	Median	38.000	Mode	35.000
Std dev	12.295	Variance	150.932	Minimum	7.000
Maximum	82.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	29.000	50.00	38.000	75.00	46.000

Valid cases 892 Missing cases 1402

M6Q14Q15 MDTP 6 plus int hi mth grd and hi mth cl

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	6.00	1	.0	.1	.1
	8.00	2	.1	.2	.3
	9.00	3	.1	.3	.7
	10.00	1	.0	.1	.8
	11.00	4	.2	.5	1.3
	12.00	1	.0	.1	1.4
	13.00	4	.2	.5	1.9
	14.00	5	.2	.6	2.4
	15.00	7	.3	.8	3.2
	16.00	5	.2	.6	3.8
	17.00	9	.4	1.0	4.9
	18.00	8	.3	.9	5.8
	19.00	6	.3	.7	6.5
	20.00	4	.2	.5	7.0
	21.00	14	.6	1.6	8.6
	22.00	14	.6	1.6	10.2
	23.00	19	.8	2.2	12.4
	24.00	29	1.3	3.4	15.8
	25.00	25	1.1	2.9	18.7
	26.00	14	.6	1.6	20.3
	27.00	16	.7	1.9	22.1
	28.00	28	1.2	3.2	25.4
	29.00	25	1.1	2.9	28.3
	30.00	31	1.4	3.6	31.9
	31.00	18	.8	2.1	34.0
	32.00	29	1.3	3.4	37.3
	33.00	24	1.0	2.8	40.1
	34.00	24	1.0	2.8	42.9
	35.00	15	.7	1.7	44.6
	36.00	31	1.4	3.6	48.2
	37.00	24	1.0	2.8	51.0
	38.00	32	1.4	3.7	54.7
	39.00	29	1.3	3.4	58.1
	40.00	30	1.3	3.5	61.6
	41.00	29	1.3	3.4	64.9
	42.00	23	1.0	2.7	67.6
	43.00	33	1.4	3.8	71.4
	44.00	15	.7	1.7	73.1
	45.00	16	.7	1.9	75.0
	46.00	20	.9	2.3	77.3
	47.00	28	1.2	3.2	80.5
	48.00	12	.5	1.4	81.9
	49.00	21	.9	2.4	84.4
	50.00	10	.4	1.2	85.5
	51.00	17	.7	2.0	87.5
	52.00	15	.7	1.7	89.2

M6Q14Q15 MDTP 6 plus int hi mth grd and hi mth cl

53.00	8	.3	.9	90.2
54.00	16	.7	1.9	92.0
55.00	4	.2	.5	92.5
56.00	9	.4	1.0	93.5
57.00	16	.7	1.9	95.4
58.00	3	.1	.3	95.7
59.00	6	.3	.7	96.4
60.00	6	.3	.7	97.1
61.00	4	.2	.5	97.6
62.00	4	.2	.5	98.0
63.00	3	.1	.3	98.4
64.00	6	.3	.7	99.1
65.00	1	.0	.1	99.2
66.00	2	.1	.2	99.4
67.00	1	.0	.1	99.5
68.00	1	.0	.1	99.7
69.00	1	.0	.1	99.8
71.00	1	.0	.1	99.9
77.00	1	.0	.1	100.0
.	1431	62.4	Missing	
Total	2294	100.0	100.0	

Hi-Res Chart # 10:Histogram of mdtp 6 plus int hi mth grd and hi mth class

Mean	37.133	Median	37.000	Mode	43.000
Std dev	12.037	Variance	144.895	Minimum	6.000
Maximum	77.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	28.000	50.00	37.000	75.00	46.000

Valid cases 863 Missing cases 1431

M9Q9Q12 Math9 test plus interaction q9 and q12

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	9.00	2	.1	.4	.4
	12.00	2	.1	.4	.8
	13.00	1	.0	.2	1.0
	14.00	6	.3	1.3	2.3
	15.00	2	.1	.4	2.7
	16.00	5	.2	1.0	3.8
	17.00	6	.3	1.3	5.0
	18.00	6	.3	1.3	6.3
	19.00	7	.3	1.5	7.7
	20.00	11	.5	2.3	10.0
	21.00	10	.4	2.1	12.1
	22.00	9	.4	1.9	14.0
	23.00	14	.6	2.9	16.9
	24.00	14	.6	2.9	19.8
	25.00	9	.4	1.9	21.7
	26.00	8	.3	1.7	23.4
	27.00	14	.6	2.9	26.3
	28.00	14	.6	2.9	29.2
	29.00	8	.3	1.7	30.9
	30.00	12	.5	2.5	33.4
	31.00	20	.9	4.2	37.6
	32.00	21	.9	4.4	42.0
	33.00	15	.7	3.1	45.1
	34.00	19	.8	4.0	49.1
	35.00	16	.7	3.3	52.4
	36.00	10	.4	2.1	54.5
	37.00	12	.5	2.5	57.0
	38.00	16	.7	3.3	60.3
	39.00	12	.5	2.5	62.8
	40.00	21	.9	4.4	67.2
	41.00	9	.4	1.9	69.1
	42.00	13	.6	2.7	71.8
	43.00	21	.9	4.4	76.2
	44.00	10	.4	2.1	78.3
	45.00	19	.8	4.0	82.3
	46.00	12	.5	2.5	84.8
	47.00	4	.2	.8	85.6
	48.00	11	.5	2.3	87.9
	49.00	6	.3	1.3	89.1
	50.00	8	.3	1.7	90.8
	51.00	15	.7	3.1	93.9
	52.00	5	.2	1.0	95.0
	53.00	3	.1	.6	95.6
	54.00	2	.1	.4	96.0
	55.00	3	.1	.6	96.7
	56.00	1	.0	.2	96.9

M9Q9Q12 Math9 test plus interaction q9 and q12

57.00	4	.2	.8	97.7
61.00	1	.0	.2	97.9
62.00	1	.0	.2	98.1
63.00	3	.1	.6	98.7
68.00	3	.1	.6	99.4
70.00	1	.0	.2	99.6
71.00	1	.0	.2	99.8
75.00	1	.0	.2	100.0
.	1815	79.1	Missing	
Total	2294	100.0	100.0	

Hi-Res Chart # 11:Histogram of math9 test plus interaction q9 and q12

Mean	35.353	Median	35.000	Mode	32.000
Std dev	11.391	Variance	129.760	Minimum	9.000
Maximum	75.000				

* Multiple modes exist. The smallest value is shown.

Percentile	Value	Percentile	Value	Percentile	Value
25.00	27.000	50.00	35.000	75.00	43.000

Valid cases 479 Missing cases 1815

M10Q9Q12 Math10 test plus interaction q9 and q12

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	10.00	1	.0	.4	.4
	11.00	1	.0	.4	.7
	12.00	1	.0	.4	1.1
	13.00	2	.1	.7	1.8
	14.00	1	.0	.4	2.2
	15.00	6	.3	2.2	4.4
	16.00	2	.1	.7	5.1
	17.00	10	.4	3.7	8.8
	18.00	8	.3	2.9	11.7
	19.00	4	.2	1.5	13.2
	20.00	11	.5	4.0	17.2
	21.00	12	.5	4.4	21.6
	22.00	4	.2	1.5	23.1
	23.00	12	.5	4.4	27.5
	24.00	5	.2	1.8	29.3
	25.00	8	.3	2.9	32.2
	26.00	8	.3	2.9	35.2
	27.00	10	.4	3.7	38.8
	28.00	14	.6	5.1	44.0
	29.00	16	.7	5.9	49.8
	30.00	9	.4	3.3	53.1
	31.00	4	.2	1.5	54.6
	32.00	3	.1	1.1	55.7
	33.00	7	.3	2.6	58.2
	34.00	9	.4	3.3	61.5
	35.00	11	.5	4.0	65.6
	36.00	16	.7	5.9	71.4
	37.00	7	.3	2.6	74.0
	38.00	3	.1	1.1	75.1
	39.00	7	.3	2.6	77.7
	40.00	6	.3	2.2	79.9
	41.00	8	.3	2.9	82.8
	42.00	5	.2	1.8	84.6
	43.00	7	.3	2.6	87.2
	44.00	5	.2	1.8	89.0
	45.00	7	.3	2.6	91.6
	46.00	3	.1	1.1	92.7
	47.00	3	.1	1.1	93.8
	49.00	3	.1	1.1	94.9
	50.00	4	.2	1.5	96.3
	52.00	1	.0	.4	96.7
	53.00	1	.0	.4	97.1
	56.00	3	.1	1.1	98.2
	58.00	1	.0	.4	98.5
	61.00	1	.0	.4	98.9
	63.00	1	.0	.4	99.3

M10Q9Q12 Math10 test plus interaction q9 and q12

	74.00	2	.1	.7	100.0
	.	2021	88.1	Missing	
	Total	2294	100.0	100.0	

Hi-Res Chart # 12:Histogram of math10 test plus interaction q9 and q12

Mean	31.326	Median	30.000	Mode	29.000
Std dev	10.907	Variance	118.971	Minimum	10.000
Maximum	74.000				

* Multiple modes exist. The smallest value is shown.

Percentile	Value	Percentile	Value	Percentile	Value
25.00	23.000	50.00	30.000	75.00	38.500

Valid cases 273 Missing cases 2021

M9Q14Q15 Math9 test plus interaction q14 and q15

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	11.00	1	.0	.2	.2
	14.00	1	.0	.2	.4
	15.00	2	.1	.4	.9
	16.00	1	.0	.2	1.1
	17.00	3	.1	.6	1.7
	18.00	1	.0	.2	1.9
	19.00	4	.2	.9	2.8
	20.00	5	.2	1.1	3.8
	21.00	5	.2	1.1	4.9
	22.00	5	.2	1.1	6.0
	23.00	2	.1	.4	6.4
	24.00	7	.3	1.5	7.9
	25.00	13	.6	2.8	10.7
	26.00	10	.4	2.1	12.8
	27.00	8	.3	1.7	14.5
	28.00	11	.5	2.3	16.8
	29.00	17	.7	3.6	20.5
	30.00	10	.4	2.1	22.6
	31.00	6	.3	1.3	23.9
	32.00	11	.5	2.3	26.2
	33.00	9	.4	1.9	28.1
	34.00	22	1.0	4.7	32.8
	35.00	15	.7	3.2	36.0
	36.00	10	.4	2.1	38.2
	37.00	13	.6	2.8	40.9
	38.00	8	.3	1.7	42.6
	39.00	13	.6	2.8	45.4
	40.00	8	.3	1.7	47.1
	41.00	13	.6	2.8	49.9
	42.00	11	.5	2.3	52.2
	43.00	11	.5	2.3	54.6
	44.00	14	.6	3.0	57.6
	45.00	9	.4	1.9	59.5
	46.00	15	.7	3.2	62.7
	47.00	11	.5	2.3	65.0
	48.00	20	.9	4.3	69.3
	49.00	6	.3	1.3	70.6
	50.00	13	.6	2.8	73.3
	51.00	11	.5	2.3	75.7
	52.00	10	.4	2.1	77.8
	53.00	12	.5	2.6	80.4
	54.00	8	.3	1.7	82.1
	55.00	11	.5	2.3	84.4
	56.00	5	.2	1.1	85.5
	57.00	9	.4	1.9	87.4
	58.00	6	.3	1.3	88.7

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M9Q14Q15 Math9 test plus interaction q14 and q15

59.00	7	.3	1.5	90.2
60.00	6	.3	1.3	91.5
61.00	6	.3	1.3	92.8
62.00	9	.4	1.9	94.7
63.00	3	.1	.6	95.3
64.00	2	.1	.4	95.7
65.00	1	.0	.2	95.9
66.00	3	.1	.6	96.6
67.00	1	.0	.2	96.8
68.00	2	.1	.4	97.2
69.00	5	.2	1.1	98.3
70.00	1	.0	.2	98.5
73.00	2	.1	.4	98.9
74.00	2	.1	.4	99.4
82.00	3	.1	.6	100.0
.	1825	79.6	Missing	
Total	2294	100.0	100.0	

Hi-Res Chart # 13:Histogram of math9 test plus interaction q14 and q15

Mean	41.913	Median	42.000	Mode	34.000
Std dev	13.170	Variance	173.456	Minimum	11.000
Maximum	82.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	32.000	50.00	42.000	75.00	51.000

Valid cases 469 Missing cases 1825

M10Q1415 Math10 test plus interaction q14 and q15

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	14.00	1	.0	.4	.4
	15.00	1	.0	.4	.8
	17.00	2	.1	.8	1.5
	19.00	7	.3	2.6	4.2
	20.00	3	.1	1.1	5.3
	21.00	6	.3	2.3	7.5
	22.00	2	.1	.8	8.3
	23.00	3	.1	1.1	9.4
	24.00	3	.1	1.1	10.6
	25.00	1	.0	.4	10.9
	26.00	4	.2	1.5	12.5
	27.00	1	.0	.4	12.8
	28.00	2	.1	.8	13.6
	29.00	8	.3	3.0	16.6
	30.00	5	.2	1.9	18.5
	31.00	10	.4	3.8	22.3
	32.00	3	.1	1.1	23.4
	33.00	6	.3	2.3	25.7
	34.00	8	.3	3.0	28.7
	35.00	9	.4	3.4	32.1
	36.00	12	.5	4.5	36.6
	37.00	3	.1	1.1	37.7
	38.00	6	.3	2.3	40.0
	39.00	2	.1	.8	40.8
	40.00	15	.7	5.7	46.4
	41.00	11	.5	4.2	50.6
	42.00	8	.3	3.0	53.6
	43.00	8	.3	3.0	56.6
	44.00	6	.3	2.3	58.9
	45.00	8	.3	3.0	61.9
	46.00	7	.3	2.6	64.5
	47.00	9	.4	3.4	67.9
	48.00	6	.3	2.3	70.2
	49.00	4	.2	1.5	71.7
	50.00	12	.5	4.5	76.2
	51.00	4	.2	1.5	77.7
	52.00	6	.3	2.3	80.0
	53.00	6	.3	2.3	82.3
	54.00	5	.2	1.9	84.2
	55.00	7	.3	2.6	86.8
	56.00	3	.1	1.1	87.9
	57.00	3	.1	1.1	89.1
	58.00	4	.2	1.5	90.6
	59.00	3	.1	1.1	91.7
	60.00	4	.2	1.5	93.2
	61.00	1	.0	.4	93.6

M10Q1415 Math10 test plus interaction q14 and q15

62.00	4	.2	1.5	95.1
63.00	3	.1	1.1	96.2
64.00	3	.1	1.1	97.4
66.00	2	.1	.8	98.1
68.00	1	.0	.4	98.5
70.00	2	.1	.8	99.2
72.00	1	.0	.4	99.6
73.00	1	.0	.4	100.0
.	2029	88.4	Missing	
Total	2294	100.0	100.0	

Hi-Res Chart # 14:Histogram of math10 test plus interaction q14 and q15

Mean	41.649	Median	41.000	Mode	40.000
Std dev	12.408	Variance	153.963	Minimum	14.000
Maximum	73.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	33.000	50.00	41.000	75.00	50.000

Valid cases 265 Missing cases 2029

M11Q9Q12

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	13.00	1	.0	1.7	1.7
	17.00	1	.0	1.7	3.4
	22.00	3	.1	5.2	8.6
	23.00	1	.0	1.7	10.3
	24.00	1	.0	1.7	12.1
	25.00	2	.1	3.4	15.5
	27.00	3	.1	5.2	20.7
	28.00	4	.2	6.9	27.6
	29.00	1	.0	1.7	29.3
	30.00	2	.1	3.4	32.8
	31.00	4	.2	6.9	39.7
	32.00	2	.1	3.4	43.1
	33.00	1	.0	1.7	44.8
	34.00	2	.1	3.4	48.3
	35.00	1	.0	1.7	50.0
	36.00	3	.1	5.2	55.2
	38.00	4	.2	6.9	62.1
	40.00	1	.0	1.7	63.8
	41.00	5	.2	8.6	72.4
	44.00	2	.1	3.4	75.9
	45.00	2	.1	3.4	79.3
	46.00	1	.0	1.7	81.0
	47.00	2	.1	3.4	84.5
	48.00	1	.0	1.7	86.2
	49.00	2	.1	3.4	89.7
	50.00	1	.0	1.7	91.4
	52.00	2	.1	3.4	94.8
	56.00	1	.0	1.7	96.6
	61.00	1	.0	1.7	98.3
	84.00	1	.0	1.7	100.0
	.	2236	97.5	Missing	
	Total	2294	100.0	100.0	

Hi-Res Chart # 15:Histogram of m11q9q12

Mean	36.603	Median	35.500	Mode	41.000
Std dev	11.913	Variance	141.928	Minimum	13.000
Maximum	84.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	28.000	50.00	35.500	75.00	44.250

Valid cases 58 Missing cases 2236

M12Q9Q12

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	16.00	6	.3	3.7	3.7
	17.00	1	.0	.6	4.3
	18.00	1	.0	.6	5.0
	19.00	1	.0	.6	5.6
	20.00	1	.0	.6	6.2
	21.00	2	.1	1.2	7.5
	22.00	3	.1	1.9	9.3
	23.00	1	.0	.6	9.9
	24.00	7	.3	4.3	14.3
	25.00	9	.4	5.6	19.9
	26.00	7	.3	4.3	24.2
	27.00	5	.2	3.1	27.3
	28.00	3	.1	1.9	29.2
	29.00	5	.2	3.1	32.3
	31.00	1	.0	.6	32.9
	32.00	6	.3	3.7	36.6
	33.00	5	.2	3.1	39.8
	34.00	4	.2	2.5	42.2
	35.00	3	.1	1.9	44.1
	36.00	6	.3	3.7	47.8
	37.00	5	.2	3.1	50.9
	38.00	5	.2	3.1	54.0
	39.00	3	.1	1.9	55.9
	40.00	6	.3	3.7	59.6
	41.00	7	.3	4.3	64.0
	42.00	4	.2	2.5	66.5
	43.00	1	.0	.6	67.1
	44.00	10	.4	6.2	73.3
	45.00	1	.0	.6	73.9
	46.00	8	.3	5.0	78.9
	47.00	5	.2	3.1	82.0
	48.00	1	.0	.6	82.6
	49.00	7	.3	4.3	87.0
	50.00	2	.1	1.2	88.2
	51.00	6	.3	3.7	91.9
	54.00	2	.1	1.2	93.2
	56.00	1	.0	.6	93.8
	57.00	1	.0	.6	94.4
	59.00	5	.2	3.1	97.5
	60.00	1	.0	.6	98.1
	66.00	2	.1	1.2	99.4
	73.00	1	.0	.6	100.0
	.	2133	93.0	Missing	
	Total	2294	100.0	100.0	

Hi-Res Chart # 16:Histogram of m12q9q12

M12Q9Q12

Mean	37.149	Median	37.000	Mode	44.000
Std dev	11.736	Variance	137.740	Minimum	16.000
Maximum	73.000				

Percentile	Value	Percentile	Value	Percentile	Value
25.00	27.000	50.00	37.000	75.00	46.000

Valid cases	161	Missing cases	2133

M11Q1415

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	20.00	1	.0	1.8	1.8
	22.00	1	.0	1.8	3.6
	29.00	1	.0	1.8	5.5
	31.00	1	.0	1.8	7.3
	33.00	1	.0	1.8	9.1
	35.00	3	.1	5.5	14.5
	38.00	2	.1	3.6	18.2
	40.00	1	.0	1.8	20.0
	42.00	2	.1	3.6	23.6
	43.00	3	.1	5.5	29.1
	44.00	1	.0	1.8	30.9
	46.00	5	.2	9.1	40.0
	48.00	2	.1	3.6	43.6
	49.00	1	.0	1.8	45.5
	50.00	5	.2	9.1	54.5
	51.00	1	.0	1.8	56.4
	53.00	1	.0	1.8	58.2
	56.00	5	.2	9.1	67.3
	62.00	1	.0	1.8	69.1
	63.00	5	.2	9.1	78.2
	64.00	3	.1	5.5	83.6
	65.00	1	.0	1.8	85.5
	67.00	2	.1	3.6	89.1
	68.00	1	.0	1.8	90.9
	69.00	1	.0	1.8	92.7
	73.00	1	.0	1.8	94.5
	75.00	1	.0	1.8	96.4
	77.00	1	.0	1.8	98.2
	91.00	1	.0	1.8	100.0
	.	2239	97.6	Missing	
	Total	2294	100.0	100.0	

Hi-Res Chart # 17:Histogram of m11q1415

Mean	51.691	Median	50.000	Mode	46.000
Std dev	14.207	Variance	201.847	Minimum	20.000
Maximum	91.000				

* Multiple modes exist. The smallest value is shown.

Percentile	Value	Percentile	Value	Percentile	Value
25.00	43.000	50.00	50.000	75.00	63.000

Valid cases 55 Missing cases 2239

Appendix D

Disproportonate Impact and Test Bias Data MDTP Test Scores and Predictor Scales for Student Groupings by Race, Ethnicity, Gender, and Age

- - Analysis of Variance - -

Dependent Variable MATH6COR Alg Readiness 50 items
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	26.0385	9.5351	2272.9615	26
2	Asian	22.3978	9.7161	17464.5591	186
3	Black	21.1044	8.7657	24203.5538	316
4	White	28.6072	9.3796	58593.0855	667
5	Lat hisp	23.0059	9.1629	28377.9882	339
6	Filip	26.2653	8.5102	7025.1020	98
7	Other Non wh	20.6047	9.1462	7110.5581	86
8	unk	25.1885	9.7042	11394.6639	122
Within Groups Total		24.8973	9.2409	156442.472	1840

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	17913.1142	7	2559.0163	29.9670	.0000
Within Groups	156442.4722	1832	85.3944		

Eta = .3205 Eta Squared = .1027

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH6COR Alg Readiness 50 items
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
		23.5479	9.7540	6850.0822	73
F		23.8674	9.2290	79553.5551	935
M		26.1731	10.1418	85473.0769	832
Within Groups Total		24.8973	9.6728	171876.714	1840

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	2478.8722	2	1239.4361	13.2470	.0000
Within Groups	171876.7142	1837	93.5638		

Eta = .1192 Eta Squared = .0142

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH6COR Alg Readiness 50 items
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	28.6072	9.3796	58593.0855	667
2.00	NONWHITE	22.5090	9.2161	89182.6641	1051
Within Groups Total		24.8766	9.2799	147775.750	1718

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	15174.0898	1	15174.0898	176.2044	.0000
Within Groups	147775.7496	1716	86.1164		

Eta = .3052 Eta Squared = .0931

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH6COR Alg Readiness 50 items
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	25.7500	9.3559	1313.0000	16
2.00	18-21	25.9282	9.4510	74583.6938	836
3.00	22-25	25.7910	9.7135	31513.3731	335
4.00	26 and over	23.0980	9.8815	63663.7274	653
Within Groups Total		24.8973	9.6528	171073.794	1840

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	3281.7921	3	1093.9307	11.7403	.0000
Within Groups	171073.7943	1836	93.1774		

Eta = .1372 Eta Squared = .0188

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH9COR Elementary Alg 50 items
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	27.1538	8.6008	887.6923	13
2	Asian	24.7629	10.5499	21481.0928	194
3	Black	19.7119	9.0058	4704.1017	59
4	White	25.9231	8.7974	23063.2308	299
5	Lat hisp	23.7718	9.5466	13488.2416	149
6	Filip	28.1094	9.4249	5596.2344	64
7	Other Non wh	26.7333	10.0788	2945.8667	30
8	unk	22.2154	8.2225	4326.9846	65
Within Groups Total		24.8087	9.4038	76493.4448	873

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	3381.6090	7	483.0870	5.4628	.0000
Within Groups	76493.4448	865	88.4317		

Eta = .2058 Eta Squared = .0423

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH9COR Elementary Alg 50 items
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
		22.7381	8.5997	3032.1190	42
F		24.5089	9.3245	34256.7190	395
M		25.2798	9.8581	42273.8624	436
Within Groups Total		24.8087	9.5630	79562.7004	873

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	312.3534	2	156.1767	1.7078	.1819
Within Groups	79562.7004	870	91.4514		

Eta = .0625 Eta Squared = .0039

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- - Analysis of Variance - -

Dependent Variable MATH9COR Elementary Alg 50 items
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	25.9231	8.7974	23063.2308	299
2.00	NONWHITE	24.4853	10.0807	51623.1395	509
Within Groups Total		25.0173	9.6262	74686.3703	808

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	389.3872	1	389.3872	4.2022	.0407
Within Groups	74686.3703	806	92.6630		

Eta = .0720 Eta Squared = .0052

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH9COR Elementary Alg 50 items
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	30.9375	8.2983	1032.9375	16
2.00	18-21	25.3993	9.5144	51145.7597	566
3.00	22-25	23.0083	9.9169	11702.9917	120
4.00	26 and over	23.5439	9.2458	14532.4211	171
Within Groups Total		24.8087	9.4992	78414.1099	873

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	1460.9439	3	486.9813	5.3968	.0011
Within Groups	78414.1099	869	90.2349		

Eta = .1352 Eta Squared = .0183

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable MATH10CO Interm Alg 45 items
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	13.0000	.	.0000	1
2	Asian	21.1650	8.8799	15691.5550	200
3	Black	17.7727	7.5777	1205.8636	22
4	White	23.5725	8.7169	9878.0611	131
5	Lat hisp	17.8400	8.2989	3374.7200	50
6	Filip	20.5814	7.0516	2088.4651	43
7	Other Non wh	19.1579	9.6624	1680.5263	19
8	unk	20.7959	9.0806	3957.9592	49
Within Groups Total		21.1359	8.6434	37877.1503	515

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	1729.3351	7	247.0479	3.3068	.0019
Within Groups	37877.1503	507	74.7084		

Eta = .2090 Eta Squared = .0437

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- - Analysis of Variance - -

Dependent Variable MATH10CO Interm Alg 45 items
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
		20.4848	8.7039	2424.2424	33
F		20.6870	8.8903	18099.4609	230
M		21.6310	8.6914	18960.6786	252
Within Groups Total		21.1359	8.7817	39484.3819	515

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	122.1036	2	61.0518	.7917	.4536
Within Groups	39484.3819	512	77.1179		

Eta = .0555 Eta Squared = .0031

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- - Analysis of Variance - -

Dependent Variable MATH10CO Interm Alg 45 items
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	23.5725	8.7169	9878.0611	131
2.00	NONWHITE	20.2328	8.6019	24713.8388	335
Within Groups Total		21.1717	8.6343	34591.8999	466

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	1050.3662	1	1050.3662	14.0891	.0002
Within Groups	34591.8999	464	74.5515		

Eta = .1717 Eta Squared = .0295

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- - Analysis of Variance - -

Dependent Variable.. MATH10CO Interm Alg 45 items
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	26.0769	8.7793	924.9231	13
2.00	18-21	21.4703	8.2651	26368.4083	387
3.00	22-25	19.8621	9.8630	5544.8966	58
4.00	26 and over	19.0351	10.4043	6061.9298	57
Within Groups Total		21.1359	8.7250	38900.1577	515

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	706.3277	3	235.4426	3.0928	.0267
Within Groups	38900.1577	511	76.1256		

Eta = .1335 Eta Squared = .0178

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- - Analysis of Variance - -

Dependent Variable M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	41.0909	14.5468	4443.8182	22
2	Asian	37.8462	15.6579	31626.9231	130
3	Black	37.8813	11.5179	36747.0827	278
4	White	44.1031	12.7656	88324.2247	543
5	Lat hisp	35.2788	11.5655	35848.0892	269
6	Filip	39.8588	11.8212	11738.3059	85
7	Other Non wh	36.0794	11.2398	7832.6032	63
8	unk	36.8241	13.8812	20617.6574	108
Within Groups Total		39.6736	12.6167	237178.704	1498

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	18914.6688	7	2702.0955	16.9751	.0000
Within Groups	237178.7044	1490	159.1803		

Eta = .2718 Eta Squared = .0739

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- - Analysis of Variance - -

Dependent Variable M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
F		32.9552	14.0210	12974.8657	67
M		38.5520	12.5294	118995.694	759
		41.6101	13.2400	117623.851	672
Within Groups Total		39.6736	12.9210	249594.411	1498

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	6498.9620	2	3249.4810	19.4635	.0000
Within Groups	249594.4112	1495	166.9528		

Eta = .1593 Eta Squared = .0254

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- - Analysis of Variance - -

Dependent Variable M6Q3Q12 MDTP 6 plus Inter yrs out of sch and hsg
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	44.1031	12.7656	88324.2247	543
2.00	NONWHITE	37.1972	12.4164	130426.073	847
Within Groups Total		39.8950	12.5539	218750.298	1390

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	15780.3669	1	15780.3669	100.1285	.0000
Within Groups	218750.2979	1388	157.6011		

Eta = .2594 Eta Squared = .0673

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- - Analysis of Variance - -

Dependent Variable M6Q9Q12 MDTP 6 plus Inter yrs out of sch and hsg
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	32.5833	10.9583	1320.9167	12
2.00	18-21	34.4980	10.3963	80414.2470	745
3.00	22-25	44.3286	11.7048	38634.4382	283
4.00	26 and over	45.4017	14.3422	94004.0786	458
Within Groups Total		39.6736	11.9787	214373.680	1498

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	41719.6928	3	13906.5643	96.9168	.0000
Within Groups	214373.6804	1494	143.4897		

Eta = .4036 Eta Squared = .1629

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- - Analysis of Variance - -

Dependent Variable MSQ9Q12 Math9 test plus interaction q9 and q12
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	36.7273	8.5334	728.1818	11
2	Asian	37.2500	14.1569	27858.2500	140
3	Black	33.7755	11.2496	6074.5306	49
4	White	37.7116	11.3566	27600.1209	215
5	Lat hisp	34.0424	12.2742	17626.7881	118
6	Filip	36.8596	9.8641	5448.8772	57
7	Other Non wh	38.6786	11.0656	3306.1071	28
8	unk	32.0000	8.7721	4540.0000	60
Within Groups Total		36.1401	11.7932	93182.8558	678

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	2738.8330	7	391.2619	2.8132	.0068
Within Groups	93182.8558	670	139.0789		

Eta = .1690 Eta Squared = .0286

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- - Analysis of Variance - -

Dependent Variable M9Q9Q12 Math9 test plus interaction q9 and q12
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
		31.4872	9.1649	3205.7436	39
F		35.8345	11.0529	36038.8885	296
M		36.9329	12.7492	55589.4577	343
Within Groups Total		36.1401	11.8531	94834.0898	678

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	1087.5990	2	543.7995	3.8706	.0213
Within Groups	94834.0898	675	140.4949		

Eta = .1065 Eta Squared = .0113

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- - Analysis of Variance - -

Dependent Variable M9Q9Q12 Math9 test plus interaction q9 and q12
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	37.7116	11.3566	27600.1209	215
2.00	NONWHITE	35.9181	12.4391	62202.2978	403
Within Groups Total		36.5421	12.0741	89802.4187	618

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	450.9875	1	450.9875	3.0935	.0791
Within Groups	89802.4187	616	145.7831		

Eta = .0707 Eta Squared = .0050

- - Analysis of Variance - -

Dependent Variable M9Q9Q12 Math9 test plus interaction q9 and q12
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	36.4375	8.5477	1095.9375	16
2.00	18-21	33.6607	10.3196	53566.9821	504
3.00	22-25	40.3143	11.1375	8559.0857	70
4.00	26 and over	46.9659	14.4106	18066.8977	88
Within Groups Total		36.1401	10.9821	81288.9031	678

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	14632.7857	3	4877.5952	40.4422	.0000
Within Groups	81288.9031	674	120.6067		

Eta = .3906 Eta Squared = .1525

- - Analysis of Variance - -

Dependent Variable M10Q9Q12 Math10 test plus interaction q9 and q12
By levels of ETHNIC

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1	Nat Amer	20.0000	.	.0000	1
2	Asian	31.7248	11.6375	20043.7181	149
3	Black	30.4211	12.2625	2706.6316	19
4	White	33.5918	10.3444	10379.6735	98
5	Lat hisp	27.0244	11.3082	5114.9756	41
6	Filip	30.5556	9.2008	2962.8889	36
7	Other Non wh	25.0000	8.8560	1098.0000	15
8	unk	29.4348	9.3325	3919.3043	46
Within Groups Total		30.9975	10.7906	46225.1920	405

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	2171.8055	7	310.2579	2.6646	.0105
Within Groups	46225.1920	397	116.4363		

Eta = .2118 Eta Squared = .0449

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- - Analysis of Variance - -

Dependent Variable M10Q9Q12 Math10 test plus interaction q9 and q12
By levels of SEX

Value	Label	Mean	Std Dev	Sum of Sq	Cases
		29.2813	9.7724	2960.4688	32
F		30.5814	10.6644	19447.8605	172
M		31.6269	11.3545	25785.0149	201
Within Groups Total		30.9975	10.9492	48193.3441	405

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	203.6534	2	101.8267	.8494	.4284
Within Groups	48193.3441	402	119.8839		

Eta = .0649 Eta Squared = .0042

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Varia'le M10Q9Q12 Math10 test plus interaction q9 and q12
By levels of WHTNON WHITE NON WHITE

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	WHITE	33.5918	10.3444	10379.6735	98
2.00	NONWHITE	30.2989	11.2999	33198.6897	261
Within Groups Total		31.1978	11.0484	43578.3631	359

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	772.5951	1	772.5951	6.3292	.0123
Within Groups	43578.3631	357	122.0682		

Eta = .1320 Eta Squared = .0174

BEST COPY AVAILABLE

- - Analysis of Variance - -

Dependent Variable M10Q9Q12 Math10 test plus interaction q9 and q12
By levels of RECAGE recoded age categories

Value	Label	Mean	Std Dev	Sum of Sq	Cases
1.00	17 and under	31.3333	8.2829	754.6667	12
2.00	18-21	29.7485	9.4657	29836.8743	334
3.00	22-25	34.8788	13.0354	5437.5152	33
4.00	26 and over	41.9615	18.1361	8222.9615	26
Within Groups Total		30.9975	10.5050	44252.0176	405

Source	Sum of Squares	d.f.	Mean Square	F	Sig.
Between Groups	4144.9799	3	1381.6600	12.5202	.0000
Within Groups	44252.0176	401	110.3542		

Eta = .2927 Eta Squared = .0856

DIRECTIONS: A ● C USE NO. 2 PENCIL ONLY

- Use a Number 2 Pencil Only.
- Make No Stray Marks or Notes.
- Fill the Oval Completely.
- Erase Changes Completely.

LAST NAME | FIRST NAME | M.I.

TODAY'S DATE — MONTH | DAY | YEAR

SOCIAL SECURITY NUMBER

DATE OF BIRTH — MONTH | DAY | YEAR

1. ETHNIC BACKGROUND (CHOOSE ONLY ONE)
   - American Indian/Alaskan Native
   - Asian
   - Pacific Islander
   - Black/not of Hispanic Origin
   - White/not of Hispanic Origin
   - Hispanic
   - Filipino
   - Other

2. SEX
   - Male
   - Female

3. IS ENGLISH YOUR FIRST (PRIMARY) LANGUAGE?
   - Yes
   - No

4. DO YOU HAVE A VERIFIED LEARNING DISABILITY (SUCH AS DYSLEXIA)?
   - Yes
   - No

5. WHAT IS YOUR ADMISSION STATUS AT THIS COLLEGE?
   - New, first time in any college
   - New to this college but have attended other college
   - Returning to this college after absence from this college
   - Continuing at this college

6. ARE YOU A VETERAN?
   - Yes
   - No
   - Active Duty

FOR OFFICE USE ONLY

SCORE 1	SCORE 2	SCORE 3	SCORE 4	SCORE 5

READING RATE (WPM)

CAPP #2

Computerized Assessment and Placement Programs

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154953

EDUCATIONAL BACKGROUND

7. HIGH SCHOOL EDUCATION: *(Choose only one)*

- Still in H.S.
- Not a H.S. graduate
- High School diploma
- Foreign secondary diploma
- G.E.D.
- H.S. proficiency
- Certificate of completion

8. HIGHEST COLLEGE DEGREE OR CERTIFICATE EARNED:

- No degree at this time
- Certificate
- Associate Degree
- Bachelor's Degree
- Master's Degree or beyond
- Other

9. HOW LONG HAVE YOU BEEN OUT OF SCHOOL? *(Don't count or include summer)*

- Still in school
- Less than 1 year
- 1–2 years
- 3–4 years
- 5–10 years
- More than 10 years

10. HOW MANY YEARS OF ENGLISH HAVE YOU COMPLETED IN HIGH SCHOOL? *(Do not include E.S.L.)*

- Less than 1 year in high school
- 1 year in high school
- 2 years in high school
- 3 years in high school
- 4 years in high school

11. WHAT GRADE DID YOU RECEIVE IN THE LAST ENGLISH CLASS YOU COMPLETED?

A B C D F

12. WHAT IS YOUR HIGH SCHOOL GRADE POINT AVERAGE *(G.P.A.)?*

- A- to A 3.5–4.0
- B to A- 3.0–3.4
- B- to B 2.5–2.9
- C to B- 2.0–2.4
- C- to C 1.5–1.9
- D to C- 1.0–1.4
- Below D 0.–0.9

13. HIGH SCHOOL LAST ATTENDED: *(Use code sheet)*

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

14. WHAT IS THE HIGHEST LEVEL MATH CLASS YOU HAVE COMPLETED?

- None
- Basic math (arithmetic)
- Algebra I (beginning)
- Geometry
- Algebra II (intermediate)
- Trigonometry
- College Algebra/Pre-calculus
- Calculus

15. WHAT GRADE DID YOU RECEIVE IN THE LAST MATH CLASS YOU COMPLETED?

A B C D F

16. HOW LONG AGO DID YOU COMPLETE YOUR LAST MATH CLASS?

- Currently enrolled in a math course
- Less than 1 year
- 1–2 years
- 3–5 years
- More than 5 years

COLLEGE PLANS

17. PLAN TO ATTEND:

- Day
- Evening
- Day and Evening

18. COLLEGE UNITS PLANNED FOR NEXT TERM:

- Less than 6 units
- 6–8 units
- 9–11 units
- 12 units or more

19. EMPLOYMENT HOURS PLANNED WHILE ENROLLED:

- None
- 1–10 hours/week
- 11–20 hours/week
- 21–30 hours/week
- 31–40 hours/week
- More than 40 hours/week

20. MOST IMPORTANT EDUCATIONAL GOAL:

- Personal enrichment only
- H.S. diploma
- Vocational training/ certificate
- Two year degree
- Transfer to a 4 year college
- Other

21. I WOULD LIKE INFORMATION ABOUT: *(Check all that apply)*

- Financial aid
- Job placement
- Child care
- Disabled student services
- Health services
- Learning disabilities
- Veterans' program
- E.O.P.S.
- Re-entry program
- Work experience
- Orientation to college
- Choosing a major
- Career planning
- Counseling
- Transferring
- Tutoring
- Study skills
- Math skills
- Reading skills
- Writing skills
- E.S.L.

22. MAJOR: Use code sheet

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

23. HOW DEFINITE IS YOUR CHOICE OF MAJOR?

- Very
- Fairly
- Unsure

24. TRANSFER COLLEGE:

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

25. HOW IMPORTANT IS IT TO THE PEOPLE CLOSEST TO YOU THAT YOU GO TO COLLEGE?

- Not very important
- Somewhat important
- Very important

26. HOW IMPORTANT IS COLLEGE TO YOU PERSONALLY?

- Not very important
- Somewhat important
- Very important

27. ADDITIONAL QUESTIONS: *Optional*

1.	A	B	C	D	E	F
2.	A	B	C	D	E	F
3.	A	B	C	D	E	F
4.	A	B	C	D	E	F
5.	A	B	C	D	E	F
6.	A	B	C	D	E	F
7.	A	B	C	D	E	F
8.	A	B	C	D	E	F
9.	A	B	C	D	E	F
10.	A	B	C	D	E	F
11.	A	B	C	D	E	F
12.	A	B	C	D	E	F
13.	A	B	C	D	E	F
14.	A	B	C	D	E	F
15.	A	B	C	D	E	F